ARIZONA MEDICINE

Journal of ARIZONA MEDICAL ASSOCIATION

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ARIZONA MEDICINE
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Original ARTICLES

CARCINOMA OF THE PANCREAS

E. Payne Palmer, M. D., F.A.C.S.
Phoenix, Arizona

Carcinoma Of The Pancreas is a disease that is too frequently overlooked. The most important thing that the clinician can do is to keep carcinoma of the pancreas in mind when examining the upper abdomen. Malignant tumors of the pancreas are practically always carcinoma. Among carcinoma in general, that of the pancreas is not infrequent, forming from 1.5 to 2 percent of all carcinomas. The tumor is ordinarily of the scirrhous type, but there also occurs the medullary, which is larger and softer. The growth may arise either from the cylindrical cells lining the ducts or from the cells of the accini. Rarely myxomatous degeneration has been found, resulting in a very soft tumor.

Most often an early diagnosis must be made by a consideration of the physical and psychological symptoms. In every case a history of mild digestive distress extends over an appreciable period of time prior to the inaugural symptoms. An impaired appetite is, as one would expect, a common complaint. Weight loss is almost invariably present and is notable for its degree and rapidity.

Pain is described by about three out of four patients. It occurs more often when the body or tail is involved. It most often is situated in the upper abdomen and frequently radiates into the back. It is characteristic for pain to be exaggerated at night, or when the patient is recumbent; frequently the patient sits or stands in a stooped position.

Pain is quite often severe and persistent. It is dull, pressing, burning, aching or boring and is unrelated to the digestive cycle. When one finds an epigastric pain for which the patient takes aspirin, one should think very carefully about carcinoma of the pancreas.

The resulting jaundice is relatively painless, is of gradual onset, but once established does not yield, rather deepens steadily. In exceptional cases, it may set up suddenly. It usually appears within a few weeks or months from the date of the onset of symptoms. In the presence of jaundice, a distended gallbladder which is palpable through the abdominal wall is indicative that the obstructive jaundice is due to carcinoma of the head of the pancreas. The distension of the gallbladder was long ago observed by Courvoisier to be so common that he felt justified in formulating his well known law, the substance of which is that in the presence of chronic jaundice, if the gallbladder is distended, the cause of the obstruction is a tumor either in the common duct or in the pancreatic head, whereas in case of obstruction of the common duct by stone, the gallbladder will usually be found contracted. It is now generally accepted that Courvoisiers law holds good in about eighty percent of the cases.

Anemia is generally only mild in degree in carcinoma of the pancreas. Some patients with carcinoma of the pancreas present an interesting group of mental symptoms consisting principally of anxiety, obstinate insomnia, crying spells, and an overwhelming fear of impending disaster. Multiple venous thrombosis appear to occur more often in carcinoma of the pancreas than in carcinoma of other organs. Diarrhea has been

Read before the 61st Annual Meeting of the Arizona Medical Association, Phoenix, May 1, 1952.

noted as a frequent symptom, but is often preceded by a period of constipation. Some patients are plagued by a frequent but fruitless desire to go to stool. The stools, as a rule, contain no bile, but the urine is deeply bile stained. Exclusion of bile from the duodenum may be demonstrated by the examination of the duodenal contents. In the more advanced stages of the disease, blood may be noted in the stool or in the gastric contents, particularly if ulceration into the stomach or bowel has occurred. Edema of the legs may come on owing to obstruction of the inferior vena cova, to cardiac weakness or even to pure inanition; and ascites is found in a few cases where the portal vein becomes obstructed. The internal secretion is not usually interfered with, inasmuch as there is nearly always a sufficient portion of the pancreas left uninvolved by the disease to carry on sugar metabolism. Nevertheless, the carbohydrate metabolism of the patient should be checked. Marble has called attention to the rather high incidence of carcinoma of the pancreas in diabetes. The disease affects older people predominantly and is four times more common in males than in females.

A palpable tumor can be felt in about one-third of the cases. The tumor grows commonly forward above the lesser curvature of the stomach, as well as through the pancreas itself. On account of transmitted pulsation from the underlying aorta, aneurism may be suspected. Expansile pulsation, however, is absent and the differential diagnosis is not often difficult. Enlargement of the liver is a common finding when jaundice is present. It is due to retained bile and not to metastasis. Metastasis appears early and involves the neighboring lymph nodes and the liver, but it is also common for it to spread by contiguity through the peritoneal cavity and into neighboring organs. The patient frequently dies before the metastatic growth reaches any appreciable size, so that at operation the liver may seem to be free though in reality is studded with small deposits. When the tumor is situated in the head, the chief difficulty lies in the differentiation from chronic pancreatitis. Pain is common to both, but in the case of chronic pancreatitis, a careful history will often elicit the symptoms of an acute or subacute attack, suggestive of pancreatitis, while in the case of carcinoma such a history is rare. Jaundice is common to both, but is apt to be deeper in the case of carcinoma of the pancreas. In chronic pacreatitis there is a frequent coincidence of gall stones, and there may have been a history of gall stone attacks, or of a previous intermittent jaundice, suggesting gall stones. On the other hand, in carcinoma of the pancreas the jaundice is nearly always progressive and persistent without remission, and stones are rarely found. For this reason also, if stones are present in coincidence with chronic pancreatitis, the gall bladder will not usually be dilated, although indeed that is still possible.

One of the most valuable means of recognizing carcinoma of the pancreas is roentgenological examination of the upper gastrointestinal tract by means of the barium meal. The x-ray changes which may be observed depend upon encroachment by the carcinoma of the pancreas usually on the stomach and duodenum. This means that the study is apt to be negative during the very early stage when the diagnosis is most important, for then the carcinoma has not yet attained sufficient size to produce compression or infiltrative changes in the adjacent viscera. It is likewise true that the roentgenotogic alterations are not pathognomic of carcinoma of the pancreas. Nevertheless, almost half of the patients examined roentgenologically at the Graduate Hospital and at the University of Chicago, presented signs suspicious of a tumor in and about the head of the pancreas. A widening of the duodenal arch, a slowing of the duodenal flow, and a defect in any part of the duodenum have been pointed out by roentgenologists as indicative of a tumor of the head of the pancreas. X-ray examinations may be helpful by suggesting the presence of a tumor by such findings, as enlargement of the duodenal loop, indentation of the gastric or duodenal wall or the actual duodenal obstruction and mucosal irregularity. In a few cases, actual obstruction of the gut, usually the second portion of the duodenum, is caused by pressure of the growth.

Carcinoma of the pancreas is a rapidly fatal disease. Counting from the onset of symptoms the duration of life has been estimated by various authors as from four to seven months; but there are instances on record of prolongation of life through operation up to four years, so that operation to relieve itching and jaundice by a short circuiting is always justifiable.

Because of the difficulties in establishing a

diagnosis, the discovery of an operable carcinoma of the head of the pancreas is a rare accident, and consequently surgical treatment of this condition is essentially palliative. Exploration is justifiable and should be urged for two reasons. There is always the case in which the obstruction is due to a chronic pancreatitis and on opening the abdomen the pancreas will usually be firm to palpation and enlarged throughout; it is frequently impossible for the surgeon to say whether the mass that he feels is inflammatory or carcinomatous, unless obvious metastases are present in the lymph nodes along the upper border of the pancreas and the liver. Resection of the duodenum and head of the pancreas for carcinoma as done by Whipple, Parsons, and Mullins had better be done by these men who perform the operation occasionally, rather than by the surgeon who operates such cases once or twice during his career.

CONCLUSION

Carcinoma of the pancreas is not infrequent. It begins with a mild digestive distress extending over an appreciable period and commonly develops with severe pain accompanied by painless jaundice. According to the laws of Courvoisier, the gallbladder is distended and a tumor is indicated in eighty percent of all cases. The tumor grows commonly forward above the lesser curvature of the stomach. It is frequently mistaken for chronic pancrititus. Roentgenological examination is one of the most valuable means of recognizing carcinoma of the pancreas.

Carcinoma of the pancreas is a rapidly fatal disease. The duration of life has been estimated by various authorities as from four to seven months. The surgical treatment of this condition is essentially palliative. The technical difficulties and the danger of a radical operation are obviously very great.

THE DETECTION AND CORRECTION OF HEARING LOSS IN THE YOUNGER CHILD

John S. Mikell, M.D.
Tucson, Arizona

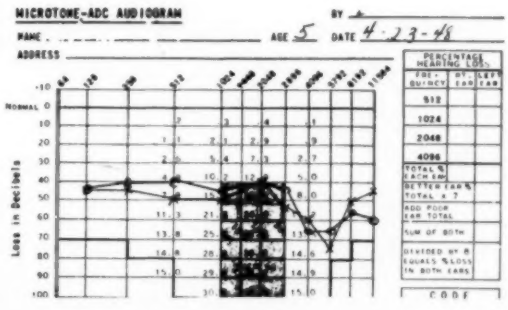
This paper is being presented so that physicians may better appreciate the magnitude of the problem of a hearing loss in the younger child.

The detection of a hearing difficulty in the younger child depends upon us, who are responsible for the child's welfare, and ultimately for its physical and mental development throughout life. An unaided hearing loss will cause a delayed development in children with a normal mental capacity and may likely result in progressive mental degeneration. The earlier a hearing loss can be detected the better the opportunity of preventing such a calamity.

A mother brought her five-year old daughter into the office and made this statement, "I almost hate this child! She has been expelled from three nursery schools. She is disobedient, belligerent, irresponsible, untidy, resentful, and throws tantrum after tantrum."

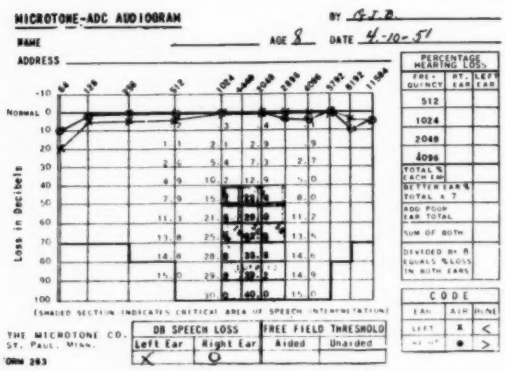
On a routine ear, nose, and throat examination, including an audiometric study and the use of the nasopharyngoscope, it was found that this child had a marked hearing loss. This, I felt, was due to infected hyperplastic lymphoid tissue encroaching upon the eustachian tube orifices. This tissue receded following the application of radium to the nasopharynx, and the child's hearing was restored to normal. All of the behavior problems resulting from the personality changes were corrected, and the youngster was restored to a happy, healthy, normal childhood—she just simply blossomed out. One of the most gratifying features of this case was the dramatic change in the mother-child relationship.

Audiograms of this child parallel her mental and physical development. The first audiogram, at the age of five years, when she presented a severe behavior problem, showed a 40% hearing loss.



Read before the Arizona Medical Association at its meeting in Tucson in April, 1951.

Another audiogram, taken three years following irradiation to the nasopharynx, shows that her hearing had been restored to normal. All abnormal personality traits had vanished.



The Digest of Neurology and Psychiatry estimates that there are 3,000,000 American children with hearing loss due to middle-ear defects, which may lead to varying degrees of deafness in later life. There are also many other children who are handicapped by a hearing loss caused by other than middle-ear disease.

There are several causes of a hearing loss in the younger child. The first is the result of eighth nerve damage. This may be from birth injury, malformation, or from the mother having suffered a virus infection at from six weeks to three months of pregnancy. A very high percentage of children born of mothers following such an infection (especially Rubella) are born either deaf or blind. Some authorities place this percentage as high as 70%. Immunization, when possible, of all pregnant women who have been exposed to any such infection in the first trimester might modify the severity of the disease, thereby reducing the number of children having a congenital type of deafness.

Immunization should also be considered in all pre-school children who have been exposed to virus infections so that the severity of the infection may be modified. A severe virus infection may cause an irreversible nerve deafness which would result in the cessation of word formation following apparently normal speech development.

Second, there is the conductive type of hearing loss. This type of deafness is caused by middle-ear disease usually resulting from malfunction of the eustachian tubes. Much can be done toward correcting this type of hearing loss.

There is also a mixed type, which is both nerve and conductive in nature. When the conductive type is superimposed upon the nerve type of deafness, it is important to eliminate the causes of the conductive type, which will raise the hearing to the level of the loss resulting from the nerve damage.

One should suspect a hearing loss in a child if there is a lack of response, excessive shyness, belligerence, defiance, or unnatural speech. You should inquire if the child is backward in its training. Those children showing any of these changes, in the presence of a non-symptomatic serous type of otitis media, allergic rhinitis, sinusitis, or hypertrophied tonsils or adenoids, should be sent for an otological examination. All children with repeated attacks of otitis media should be suspected of having a hearing loss.

The routine tests in the general practitioner's office are quite simple. A watch can be used. The physician's voice can be varied in volume and pitch while talking with the child and the child's expression watched closely to determine if conversation is being registered. Better still is the use of tuning forks. If there is any indication whatsoever that the child's hearing is impaired, this child should be referred to an otologist. The Society for Crippled Children has a nationwide program for testing all younger children in the schools. Many state universities, including the University of Arizona, have established courses in hearing and speech defects. When one of these organizations sends a child to you with a suspected hearing loss and you cannot determine the exact amount of hearing acuity, an otologist should be consulted.

The otologist has many methods of determining a hearing loss in the pre-school child. These tests involve the use of whistles, bells, and various other types of sound-producing instruments. The standard audiometer is of course used. This cannot be accurate in the majority of children under five years of age due to the fact that the test depends upon the child's voluntary response.

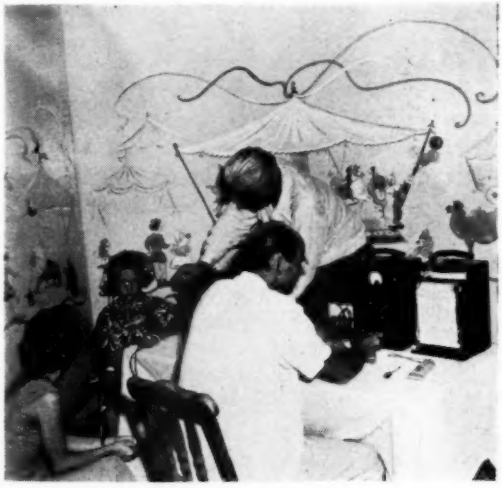
However, there has been developed by Doctors Hardy and Bordley at the Johns Hopkins Hospital Hearing and Speech Center a method of determining the exact hearing acuity of these younger children. This test involves the use of the sympathetic nervous system and is in no

way dependent upon the child's voluntary response. The reactions are involuntary and uncontrollable by the child.

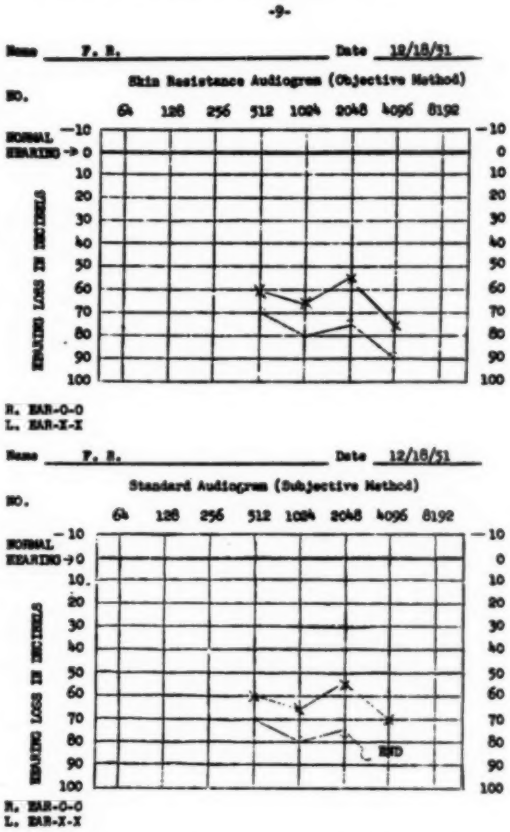
Electrodes are attached to one hand so that a mild irritating shock can be given to the patient. Earphones which are connected to a pure tone audiometer are attached to either ear. An audiometer is an instrument which is calibrated to show the intensity and frequency of the various pure tones.

Another set of electrodes is attached to the other hand and connected with the recording device. The intensity of any definite sound is increased until it is shown by the detecting device that the patient has heard the sound. He is allowed to hear this sound again, and after a three-second interval is given a mild irritating electrical shock. This tone-shock procedure is repeated until the child associates the sound with the shock.

After the child has been thus conditioned, the sound is delivered but the shock is not administered. The anticipation or expectation of the shock causes changes in the sweat glands. These changes are picked up through the skin resistance electrodes, amplified, and recorded through a group of instruments, shown in cut No. 3. The lowest intensity of sound that causes the change in the skin resistance, as recorded through these instruments, determines the child's hearing acuity.



The accuracy of this objective type of audiometry is illustrated by the following audiograms, which were made by Professor Harry Stewart, Associate Professor of Electrical Engineering at the University of Arizona, Don Peterson, Senior student in Electrical Engineering, John S. Mikell, M.D., and Garnett J. Burns, R.N.

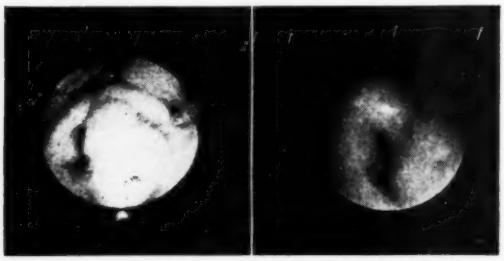


This method of testing is valuable in determining if a child should be admitted to the State School for the Deaf, or for the Mentally Defective. Many children with normal mentality have developed into human vegetables because of lack of detection and correction of such hearing loss. It has been shown that a child having as little as 20% hearing acuity may be given the proper hearing aid, and with specialized training can lead a normal life. It is advisable to put such an aid on children as soon as the defect is noted, even three years of age or younger. This is done so that the child can be taught at an early age and thus be given the opportunity to develop normally. Instruction in lip-reading should be given in conjunction with the hearing aid.

If there is a total hearing loss, the child should be sent to an institution caring for such children or receive competent supervised home

training, as offered by the Tracy Clinic in Los Angeles. I want to emphasize that a child should never be considered as "born deaf" until proven so, and that no child should EVER be admitted to a school for deaf or mentally defective without a thorough and exhaustive examination by a competent otologist.

I wish to again stress the importance of the early detection of the insidious type of progressive hearing loss. If the hearing loss is the result of malfunction of the eustachian tube (conductive type) much can be done. The tonsils and adenoids should be removed as the first procedure. Any existing allergic condition should be given the strictest attention. Sinusitis, if present, should be treated vigorously. The use of radium to the nasopharynx has given dramatic results.

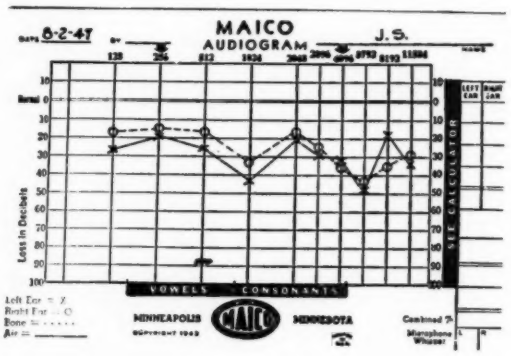


This cut is a reproduction of photographs taken through a nasopharyngoscope. The picture on the right demonstrates a normal eustachian tube orifice. The one on the left shows hyperplastic lymphoid tissue encroaching upon the eustachian tube orifice. The application of small amounts of radium causes recession of this tissue, which permits normal function of the eustachian tube and proper ventilation of the middle ear. The results obtained following irradiation are quite spectacular, as shown by the following cases selected from my files.

My most immediate interest lies in the welfare of the children of Arizona. A comparative study was made to convincingly demonstrate to the medical profession the importance of proper observation, examination, and care of school children. This comparison was made between a group of privileged children, who had had adequate medical care, and a group of underprivileged children who had not received adequate medical observation. This study revealed the following facts:

Among the privileged school children, there were 29 representing an average class of eight-year old students. There were no borderline cases, nor were there any handicapped by a hearing loss.

BEFORE IRRADIATION



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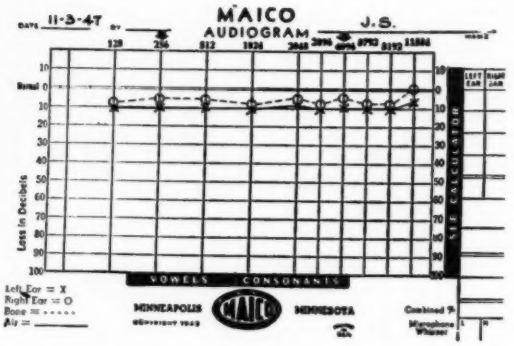

In a similar group from the underprivileged class, who for various reasons had not received adequate medical care, 34.5% were borderline cases and 28.6% were definitely handicapped by a hearing loss.

Examination of the children in the Arizona Children's Home showed 12.4% were borderline cases and 41.6% had a hearing loss which would definitely retard normal development.

A personal survey of the hearing acuity of the boys at the Fort Grant School for Juvenile Delinquents revealed that 21.2% of these boys were also handicapped by a hearing loss. Is it not shocking to realize that 10 (21%) of 47 boys committed to this institution have a physical handicap which may have caused personality changes responsible for their misconduct?

In a group of 44 underprivileged school children repeating grades 4 (9.3%) were borderline

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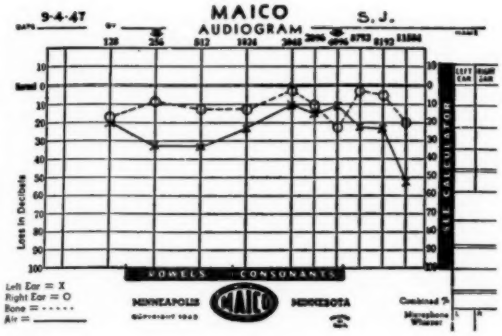

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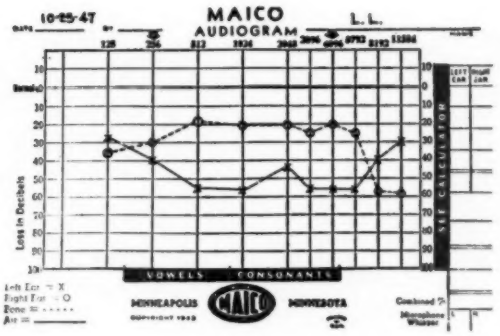

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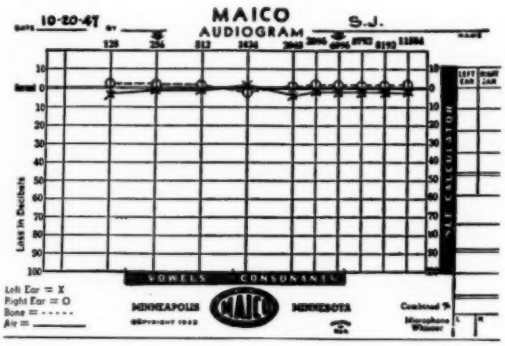

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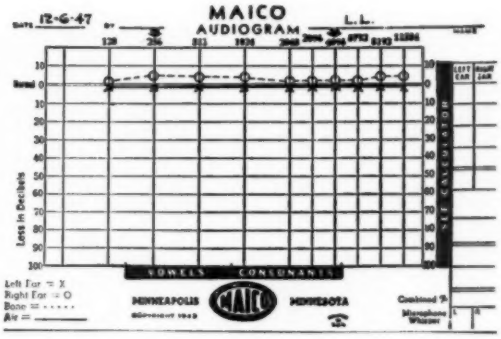

and 13 (30%) were handicapped by a hearing loss. The average cost of a child repeating a grade in the Tucson Elementary Schools is $248.00. This means a total cost of $3,224.00 to taxpayers for children repeating grades in only two schools in Pima County.

Many of the cases listed as borderline will likely become definitely handicapped. Early detection and correction of borderline cases will prevent this from occurring.

In conclusion, may I once again stress the importance of the detection of a hearing loss at an early age. A specialized educational program is available for children with a nerve or congenital type of deafness. Special legislation should be put into effect to require a thorough otological study before a child can be admitted to an institution for the deaf or mentally defective. An accurate method of determining the hearing acuity in the younger child has been perfected and is in operation in this community.

All contributing factors in the conductive type of hearing loss should be eliminated in an effort to raise the hearing to the highest possible level. If improvement cannot be obtained, removal of these contributing factors will tend to retard the progressive deafness. The correction of a hearing loss in a young child will also correct disastrous personality changes before they become irreversible. Children with normal mental capacity must not be allowed to degenerate because of undetected and unaided hearing loss.

THE THERAPY OF CARCINOMA OF THE THYROID GLAND

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INTRODUCTION

This paper does not represent any new or original clinical or laboratory research, but rather represents a brief summary of the proper manner of treating carcinoma of the thyroid gland. A considerable amount of this data represents the methods in use today in leading medical centers treating this disease. For illustrative purposes several graphs have been used from articles written by other men with due credit being given to them.

No mention is being made of the various methods used in the diagnosis of carcinoma of the thyroid gland, either clinically or with laboratory aid. The diagnosis may be unsuspected, suspected or proved as the case under illustration may point out. A very few words concerning the pathology of carcinoma of the thyroid gland are absolutely necessary. No special mention will be made of the pathology of the thyroid gland. References will be made to various forms of carcinoma of the thyroid which may exist however, and to transitions from one form to another which may take place. Methods of causing transitions from one form of carcinoma of the thyroid to another form will also be mentioned.

At the risk of a gross over simplification, but nevertheless for the sake of brevity and clarity, the only special mention that will be made regarding the pathology of carcinoma of the thyroid gland is this: the degree of uptake of radioactive iodine in either a primary or metastatic site is directly proportional to the amount of differentiation which that carcinoma may show. This is to say, the greater the degree of alveolar or follicular formation with resultant colloid deposition, the greater the uptake and storage of radioactive iodine. Primary or metastatic growths which are undifferentiated, that is papillary, solid, etc., do not contain colloid and hence do not concentrate radioactive iodine.(1)

Carcinoma of the thyroid, although spoken of under one heading, cancer, may represent itself and follow a certain clinical course in one age group and in one histo-pathological form of the disease. This type at times may only distantly resemble the course taken by carcinoma of the thyroid in another age group or histopathological form. The same pathological forms of carcinoma of the thyroid in persons of different age groups may behave in unlike ways.(2) It is for this reason that the treatment of carcinoma of the thyroid as it may present itself in various clinical forms is to be discussed. Each clinical form will be the subject of a brief discussion.

Read before Sixtieth Annual Meeting of the Arizona Medical Association at Tucson, Arizona, May 2, 1951.

PROPHYLAXIS

Before entering into any discussion of the active treatment of any form of carcinoma of the thyroid, more than a few words should be devoted to the prophylactic treatment of carcinoma of this gland. It is naturally easier, under certain conditions, to prevent carcinoma than to cure the disease when situated in this location. I wish to call particular attention to one precancerous condition which may exist in the thyroid gland. This condition may be easily and effectively treated before the transformation into cancer has taken place. This pre-malignant condition which may exist is the thyroid adenoma. In order of their malignant potentialities we find these forms:

1. Solitary non-toxic adenoma.
2. Multiple non-toxic adenomata.
3. Solitary toxic adenoma.
4. Multiple toxic adenomata.

The exact incidence of carcinoma of the thyroid is difficult to ascertain. The incidence of carcinoma arising in nodular goiter for all practical purposes is available only on surgically removed goiters. The number of patients dying with nodular goiter having malignant transformation cannot be accurately evaluated. This is because removal and evaluation of the thyroid gland is not routinely done by most pathologists. The percentage of malignant change in non-toxic nodular goiter, however, is greater than is generally realized.

One outstanding factor predisposing to the development of carcinoma of the thyroid gland is the solitary, non-toxic adenoma. Depending upon which statistics one uses, the condition is actually or potentially malignant in fifteen to

twenty-five percent of solitary, non-toxic, adenomata.

Multiple non-toxic nodular goiter also undergoes carcinomatous changes, although not so frequently as the solitary variety. Figure 1 shows the incidence of carcinoma in nodular goiter, both solitary and multiple found at the Illinois Research Hospital from 1936 to 1948.(3) From these figures it is seen that it is imperative that all of these pre-malignant adenomata of the thyroid gland, particularly the solitary variety, be removed as early as possible.

Richards, McCoullough, and Crile, in a paper read at the annual meeting of tthe American Goiter Association, in March of 1950, entitled "Radio-active Iodine in the Treatment of Hyperthyroidism of Nodular Goiters" state that they never treat solitary adenomata wih radio-active iodine. They say they do not do this because of the malignant potentiality of this condition. All solitary adenomata, particularly the non-toxic variety, should be removed before a malignant transformation has taken place. The removal of all solitary non-toxic adenomata, of itself, will cause a marked reduction in the incidence of thyroid cancer.

CARCINOMA LIMITED TO THE THYROID GLAND

A relatively optimistic prognosis may be anticipated in a carcinoma of the thyroid which is limited to one lobe. This is particularly so if the carcinoma is a papillary type of growth, or in which the carcinoma is a solitary malignant adenoma with the tumor still localized within the adenoma. This is the earliest form in which carcinoma of the thyroid gland can hope to be detected clinically and grossly. The treatment of this condition is total removal of the lobe of the thyroid on the involved side together with the isthmus of the thyroid gland. Adequate visualization of the dissection with a complete view of the recurrent laryngeal nerve, is necessary if one is to avoid damage to these important structures.

It is because of the possibility of carcinoma being present, that total removal of one lobe of the thyroid gland when the pathology involves only one lobe, is preferrable to subtotal removal leaving the posterior portion of the lobe intact. It is true that it may be technically easier to do a subtotal lobectomy, than to do a total removal of one lobe. It is only by removal of the entire lobe, however, that one precludes recurrence within the lobe, or the omission of removal of all multicentrically originating carcinomata, of the thyroid lobe. It has been pointed out by Black(4) that at the Mayo Clinic in thirty-six cases in which subtotal lobectomy was performed for papillary carcinoma, there was recurrence in the residual thyroid in four per cent of these cases. In twenty-three cases in which total lobectomy was performed there were no recurrences.

We may mention in this category the unsuspected carcinoma of the thyroid gland still within the confines of the capsule. In this case we take those cases in which thyroidectomy was done for some other cause besides carcinoma of the thyroid, as for example: solitary or multiple adenomata, either of these being toxic or non-toxic; Graves' disease, Riedel's struma or Hashimoto's struma. The tissue removed is submitted to the pathologist for pathologic examination at the time of operation, and the report is returned that carcinoma of the thyroid is present. It is important to know whether or not this is papillary, alveolar and follicular, or a solid type of carcinoma. However, it is even more important to know that one has removed the entire lobe on the involved side. For this reason, again, I wish to state that whenever possible, total lobectomy is the treatment of choice, particularly when adenomatous goiter involves one lobe of the thyroid gland.

When a multicentrically originating carcinoma of the thydoid gland is found at the primary operation, total thyroidectomy is the operation of choice, due care being taken to preserve as much of the parathyroid tissue as possible. This operation may produce myxoedema, but the patient can then be carried on thyroid extract and proceed to do very well while on this medication.

One thing is certain, and that is that at the present time the method of treatment which offers the greatest possible chance of cure is surgical removal beyond the extent of the tumor. This places a grave responsibility upon the first person operating upon a patient in which a carcinoma of the thyroid is present or suspected. The initial operator should be able to recognize the pathology of the disease. Pre-operatively, he should be able to plan a surgical attack with a mind toward the treatment of cancer. This means complete surgical removal, wide of the tumor, in all places, and not once encroaching

upon the tumor or breaking into the capsule of a malignant adenoma.

LATERAL ABERRANT THYROID

Lateral aberrant thyroid, or so-called benign metastasizing adenoma of the thyroid gland, is mentioned separately only to stress one important point. That important point is that for all clinical purposes, no such thing as a lateral aberrant thyroid exists. The so-called lateral aberrant thyroid is a non-existing entity. This condition always represents an extremely slow growing metastatic carcinoma of the thyroid gland. The primary carcinoma may be clinically undetectable. The so-called lateral aberrant thyroid is a very slowly growing metastatic carcinoma from an extremely small primary growth arising in the lobe of the thyroid on the same side of the neck.

Carcinoma originating in an adenoma of the thyroid is usually papillary and may grow slowly and metastasize to the nodes of the neck very gradually. On the other hand, primary carcinoma arising in the thyroid gland itself, rather than in an adenoma, is usually of the alveolar type and spreads more rapidly by the blood stream to the lungs. When the so-called lateral aberrant thyroid carcinoma is present the condition would be treated as what it really is. It is carcinoma arising in the lobe of the thyroid with metastasis to the adjacent cervical nodes. This condition is treated best by the total removal of the isthmus and corresponding lobe of the thyroid, together with an incontinuity radical neck dissection on the involved side.

CARCINOMA OF THE THYROID IN CHILDREN

Carcinoma of the thyroid gland in children occupies a separate chapter in the treatment of this disease. B. K. Duffy, M.D., in addressing the American Goiter Association on March 10, 1950, pointed out the predominance of the papillary form of the disease in children.(5)

The initial complaint in this age group is usually a painless swelling occurring beneath the sternomastoid muscle on one side of the neck. The swelling represents a metastatic form of papillary carcinoma of the thyroid.

Next in frequency in children is found the alveolar and follicular type. There is a greater affinity for this type of carcinoma of the thyroid in a child to take up radio-active iodine than there is for a similar microscopic type of carcinoma in an adult to take up the radio-active isotope.

The solid type of carcinoma simplex, occupy a relatively small percentage of cases of carcinoma of the thyroid gland in children.

The solid type of carcinoma which has the most undifferentiation, or dedifferentiation as one may wish to say, has the poorest prognosis, while the papillary type has the best prognosis. The alveolar and follicular type lies between the solid and papillary type as far as prognosis is concerned.

The children most commonly affected are between the ages of nine and fifteen. The disease is relatively rare below the age of six and is not common between the ages of sixteen and twenty-one. It is found in females twice as often as in males.

Realizing the extremely grave prognosis of such a condition, the primary treatment consists of total thyroidectomy with radical neck dissection of the side in which metastatic nodes are present. The dissection would be an incontinuity type of dissection including the primary growth and the structures included in the neck dissection. Surgery should usually be preceeded by radio-active iodine tracer studies.

CARCINOMA OF THE THYROID WITH INVOLVEMENT OF CONTIGUOUS STRUCTURES BY DIRECT SPREAD

In view of recent enthusiasm over the use of radio-active iodine in the treatment of carcinoma of the thyroid, a great many workers today have lost sight of previously mentioned facts. The most effective treatment of carcinoma of this organ is by wide and complete removal of the tumor. Today this is the only method by which one can be sure of a complete cure. Should a carcinoma of the thyroid infiltrate through and beyond the capsule of the thyroid gland and into any adjacent structure, this structure should be removed with the thyroid in a block dissection. If the infiltration through the capsule of the gland takes place anteriorly into the ribbon muscles causing fixation of these to the thyroid, they should be removed in a block dissection. Should a carcinoma of the thyroid involve the thyroid cartilage of the larynx or the rings of the trachea, the larynx, or involved trachea together with the larynx, should be removed along with total thyroidectomy and radical neck dissection, if the latter is necessary. If the involvement has extended into the eso-

phagus, this structure should also be removed.

The operator should be trained and equipped to handle adequately the removal of whatever contiguous structures are involved in the carcinoma. It is only by this complete surgery that the disease is to be eradicated. Carcinoma of the thyroid gland residual in the larynx, trachea, or esophagus produces death just as surely as residual or metastatic carcinoma elsewhere. Indeed the terminal stage of the disease in these locales can be one of the worst. Rather than leaving the carcinoma to be treated by radio-active iodine therapy, x-ray or radium, the entire area of carcinoma should be removed surgically whenever possible. This should be done even though laryngectomy, cervical esophagectomy, or laryngo-esophagectomy together with thyriodectomy and radical neck dissection is necessary.

CARCINOMA OF THE THYROID WITH METASTASIS LIMITED TO THE CERVICAL LYMPH NODES

This type of carcinoma is usually of the papillary type. This histological type of carcinoma of the thyroid has a marked tendency toward metastasis to the cervical lymph nodes without evidence of further distant metastasis for prolonged periods of time. If papillary, this lesion usually remains localized in the thyroid itself for a period of many months or years before metastasizing to the cervical nodes. This has been previously mentioned under the heading of so-called lateral aberrant thyroid or benign metastasizing adenoma. It is to be developed more fully at this point.

When originating in an upper pole of the thyroid, metastases are usually found in the upper deep cervical nodes, even as high as the node immediately beneath the mastoid process. Lesions arising more deeply within the lobe spread chiefly to the lower cervical nodes as well as the nodes in the tracheoesophageal groove and also to the pretracheal nodes extending into the mediastinum. Lesions arising in the isthmus of the gland may spread to the nodes on either side of the neck, however, their main spread is inferiorly and into the retrosternal nodes of the mediastinum.

The preferred treatment for this type of carcinoma is total removal of the isthmus and lobe on the affected side together with an in-continuity radical neck dissection. This dissection includes removal of the ribbon muscles, isthmus, lobe of the thyroid, stenomastoid muscle, internal jugular vein, external jugular vein, all of the lymphatic drainage structures from the clavicle to the mastoid process and from the midline of the neck to the anterior border of the trapezius muscle, and all structures between the platysma muscles and the muscles supporting the skeletal framework of the neck. The spinal accessory nerves are usually left intact. The phrenic nerve, the vagus nerve, the sympathetic nerve trunk, the recurrent laryngeal nerve, and the carotid artery are left. Usually the parathyroid glands are left on the uninvolved side. Dissection of the digastric and submental triangles for this condition is practically never needed. From such a radical neck dissection there is minimal deformity produced and it is not evident to any great extent.

If radio-active iodine therapy is available and if isotope therapy is contemplated, tracer doses of radio-active iodine should be given before surgery and radio-autographs carried out along with the routine microscopic examination of tissue removed.

CARCINOMA OF THE THYROID WITH DISTANT METASTASIS

Carcinoma of the thyroid gland when first seen with distant metastasis, or which subsequently develops distant metastasis, is the type of thyroid carcinoma that is best treated by radio-active iodine therapy. Radio-active iodine, or I_{131}, is the unstable or radioactive isotope which possesses a half-life of eight days. This is to say, that on any given date, only one-half of the quantity of radio-active iodine will remain after eight days have passed. The remainder will have undergone a nuclear transformation. It was until recently prepared by neutron bombardment of tellurium with subsequent chemical separation of the two materials. Now, however, it has been found feasible to separate radio-active iodine from other uranium fission products as by-products of pile operation. Radio-active iodine thus prepared is carrier free. That is, there is no admixture with stable iodine, and in recent months it has become tellurium free also. There is, however, some contamination of another radio-active isotope, Iodine I_{133}. This isotope, however, has a short half-life of twenty two hours and the degree of contamination is not great, particularly after time has elapsed in transit.(7)

The therapeutic effect of radio-active iodine

Table 1. Incidence of Carcinoma in Nodular Goiter (Including Toxic, Nontoxic and Carcinoma) at the Illinois Research Hospital, 1936 - 1948.

Type of goiter	1936-1944		1944-1948		1936-1948	
	No. of cases	Per cent carcinoma	No. of cases	Per cent carcinoma	No. of cases	Per cent carcinoma
Toxic nodular	330	1.2	48	0	378	1.0
Solitary	(71)	0.0	(17)	0	(88)	0.1
Multinodular	(259)	1.6	(31	0	(290)	1.4
Nontoxic nodular	192	17.1	93	17.2	285	17.15
Solitary	(92)	24.0	(51)	(25.5)	(143)	(24.4)
Multinodular	(100)	(11.0)	(42)	(7.1)	(142)	(9.8)
Total	522	7.2	141	11.3	663	8.0

Fig. I. INCIDENCE OF CARCINOMA IN VARIOUS TYPES OF NODULAR GOITER.

on carcinoma of the typroid gland is directly proportional to the degree of function of the primary or metastatic tumor. We find that whenever the primary or metastatic tumor contains colloid, a relatively high uptake of the radio-active iodine may be anticipated. The alveolar and follicular types of carcinoma show, therefore, a much larger uptake of radio-active iodine than do the papillary or solid types of tumors. Solid forms of carcinomata, and sarcoma in particular, exhibit very poor radio-active iodine uptake. Metastatic nodules do not show any constant affinity for radio-active iodine. It is believed that metastatic nodules alternate in the process of taking up the radio-active isotope.

Usually the initial uptake of radio-active iodine by either a primary tumor or a metastatic tumor is poor and the uptake of radio-active iodine for adequate therapeutic effect must be altered by one of several means.

As long as the normal thyroid gland remains in the body and performs its function, the metastatic tumor does not tend to function. However, when the normal thyroid gland is removed, the

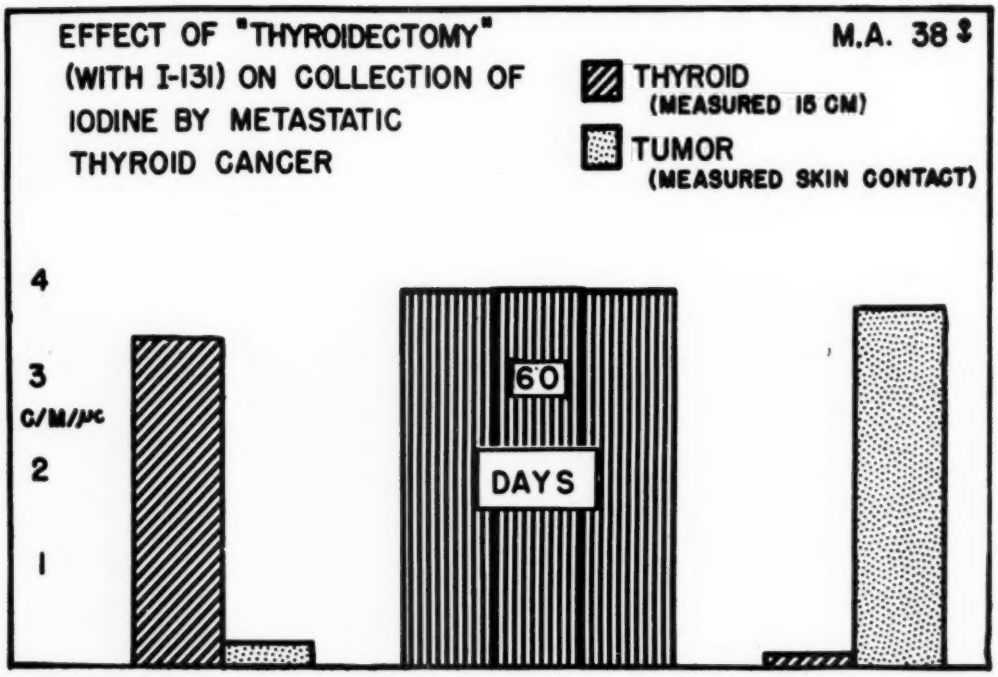

Fig. 2.—Effect of Thyroidectomy on Radioactive Iodine uptake of Metastatic Cancer.
The cross-hatched columns represent the "iodine pickup" by thyroid tissue in the neck. The stippled columns represent the "iodine pickup" by a metastasis in the spine. The activity is recorded as counts per minute divided by microcuries administered. Measurements over the thyroid were made at 15 cm. from the skin; those over metastasis were made at the skin surface. On the left are recorded measurements made before the normal thyroid was destroyed. Columns on the right show the observations made on the pickup of iodine administered sixty days after destroying the normal thyroid.

metastatic nodules tend to take over the function of the thyroid gland. So we see, that by doing a radical surgical removal of the primary thyroid carcinoma and remaining gland together with all surgically removable metastatic nodes in the neck, although no curative therapy is accomplished, the uptake in the metastatic nodules of the radio-active iodine may be increased. (Figure 2).

The uptake of radio-active iodine in metastatic nodules may be increased by the oral administration of thiouracil. The administration of thiouracil produces a pharmacological thyriodectomy. By beginning with an oral dose of four hundred milligrams per day and increasing this gradually to a dosage of two thousand milligrams per day for approximately six weeks, a change in the uptake of the metastatic nodules may be found. The uptake may be markedly increased. Figure 3 demonstrates the increased uptake in metastatic carcinoma following the use of thiouracil to increase this uptake.(6)

The third method used in increasing the uptake of radio-active iodine in metastatic thyroid cancer is by the use of thyrotropic stimulating hormones T.S.H. This hormone is given in doses of thirty units daily for one week and after forty-eight to seventy-two hours an increase in the radio-active iodine uptake by the metastatic tumor may be anticipated. In a relative manner the metastatic lesions are stimulated to function. Figure 4 demonstrates the increased uptake in a metastatic nodule after T.S.H. therapy.(6)

Should all of these methods be tried and the uptake of the metastatic tumor be minimal very poor results with radio-active iodine can be anticipated. However, should a reasonable uptake result, the patient can be carried indefinitely on radio-active iodine given approximately every two weeks. A great many observers have found a static condition of metastatic thyroid carcinoma under radio-active iodine therapy. However, eventually all cases do show progressive spread, even while taking radio-active iodine.

If there is an excellent initial uptake of I_{131}, or if the initial uptake is poor and a good response to thyroidectomy, thyrouracil, or thyro-

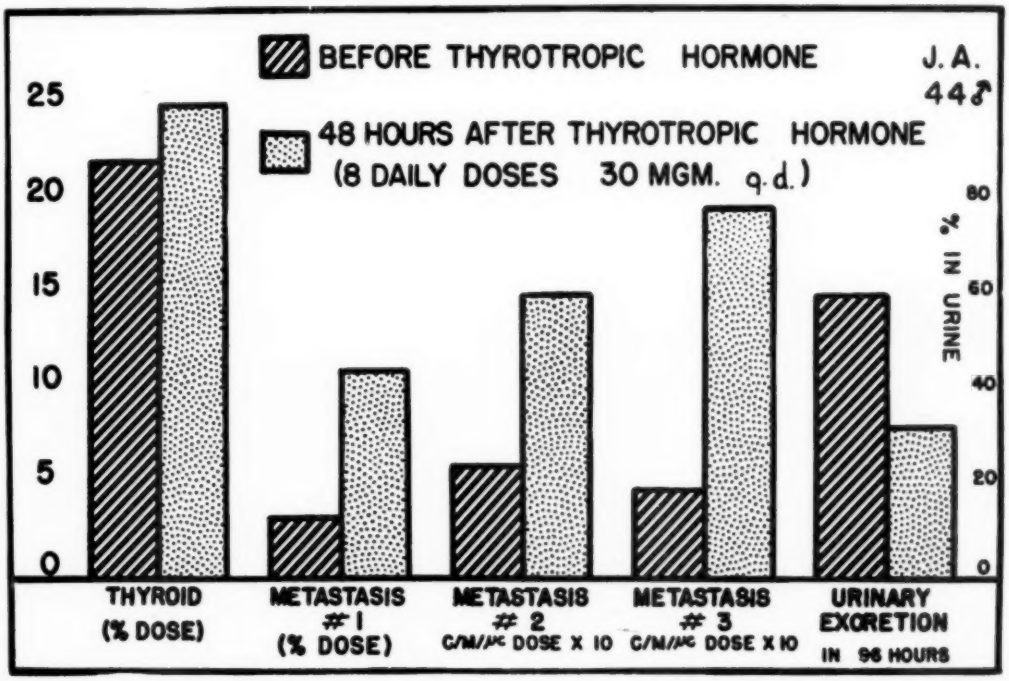

Fig. 3.—Effect of thiouracil on radioactive iodine uptake of metastatic cancer.

The cross-hatched columns represent the "pickup of radioactive iodine" by the thyroid and 3 metastases, as well as the urinary excretion of radioactive iodine prior to treatment wth thyrotropic hormone. The stippled columns represent the per cent pickup by thyroid and metastases and the urinary excretion after stopping treatment with thyroid-stimulating hormone. It will be noted that the pickup on all 3 metastases was increased after such treatment whereas there was no significant change in the thyroid's avidity for radioactive iodine. The urinary excretion of radio-iodine was decreased following treatment with thyroid-stimulating hormone.

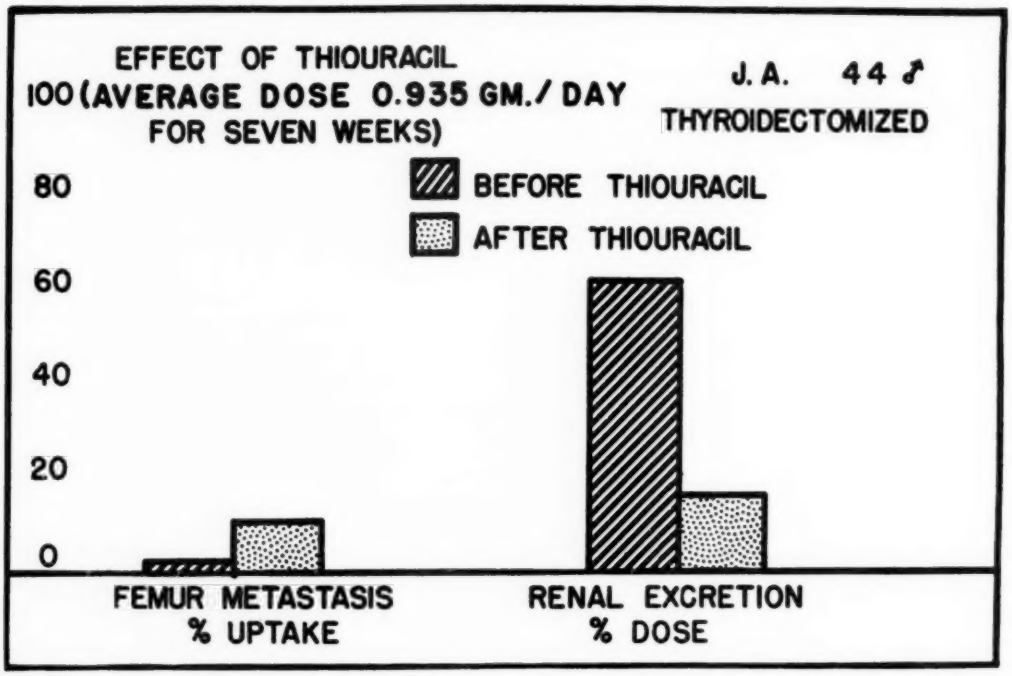

Fig. 4.—Effect of thyrotropic hormone on radioactive iodine uptake.
The cross-hatched columns represent observations on the "pick-up of radioiodine" by 1 metastasis and the urinary excretion of radioiodine before beginning treatment with thiouracil. The stippled columns represent the "pickup of I(131)" by the same metastasis and the urinary excretion of I(131) after prolonged treatment with thiouracil.

topic stimulation hormone is obtained, and the uptake of the metastatic nodules is increased, a therapeutic dose may then be given. Further studies are then done to ascertain the uptake of such a therapeutic dose, rate of excretion, etc.

Generally speaking the uptake of a metastatic nodule with radio-active iodine is decreased by the simultaneous administration of x-ray therapy or radium therapy to this nodule.

X-RAY AND RADIUM IN CARCINOMA OF THE THYROID

Gamma-ray therapy with radium or X-ray may be used on either the primary or metastatic tumor. This is an entire subject in itself. However, several things are worthy of mention at this time regarding these therapeutic agents.

1. While using x-ray or radium therapy, the uptake of I_{131} in the treated area is diminished.

2. These tumors belong to the so-called radio-resistant group of tumors.

3. When giving x-ray therapy, it should be borne in mind that to be effective a tumor dose of at least six thousand roentgens is needed in six weeks. Due care should be taken in the selection of fields, filters, and the care of the skin in order to be able to deliver this dosage. Many times it is exceedingly difficult.

4. When interstitial radium needles are employed, a tumor dose of at least six thousand gamma-roentgens should be delivered over a period of approximately one week. Low intensity interstitial needles are the method of choice.

SUMMARY

1. A clinical classification of carcinoma of the thyroid is given for purposes of outlining proper therapy.

2. The importance of removing all non-toxic adenomata of the thyroid gland, particularly the solitary non-toxic adenoma, before malignant change has taken place, is stressed.

3. The responsibility of the initial operator in the final outcome of the condition is stressed.

4. The indications for treatment of thyroid carcinoma by means of surgery is outlined.

5. The treatment of carcinoma of the thyroid gland with I_{131} is discussed.

6. The use of x-ray and radium in the treatment of carcinoma of the thyroid is mentioned.

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MODERN TREATMENT OF SOME COMMON SKIN DISEASES

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The best treatment of a skin disease is not in all cases tthe newest. Certain general principles which have been acceptable for many years are still acceptable. Some ancient methods are still as good as any. In some cases there may be several different approaches to the same problem, one as good as another. I shall not burden you with a lengthy discussion of many different forms of treatment for the same condition. It is not my intention to review the literature. I wish merely to give a concise statement of the methods I use, methods which I have found best suited to my needs. Other physicians may use other methods which to them are better suited. There is no intent on my part to imply that the methods outlined here are the only acceptable procedures.

There is one rule handed down from our dermatological grandfathers which is still important. I wish to emphasize it strongly. It is this: DO NOT OVERTREAT. Treat the skin gently. Give it every opportunity to employ its own powers of recovery. This rule is especially important in the presence of acute inflammation. Application of soothing wet dressings is most desirable at such times. A one percent aqueous solution of aluminum acetate is excellent. Occasionally an individual may respond better to a weak solution of boric acid or magnesium sulfate. A cool solution is usually better for an acute dermatitis than a warm one. If an acute dermatitis is unaccompanied by weeping and crusting, it is often desirable to follow the wet dressings with a lotion containing a powder for its cooling effect. Calamine lotion or various types of zinc oxide lotions suit this purpose admirably. Itching is usually severe in these cases. Phenol or liquor carbonis detergens may be added for their anti-pruritic properties. If weeping and crusting are present the powdery lotion should not be used. In such cases one may use a hypoallergenic cold cream. When the inflammation is somewhat less acute a paste may be used. A modification of the ancient and honorable Lassar's Paste is excellent. A subacute or chronic dermatitis may be treated with a less mild or even a stimulating agent.

There are several other general principles I wish to mention. Most of these are in the form of "Do Nots." Do not use Whitfield Ointment in full strength. It will cause irritation in numerous cases, and when used in a milder form it is quite effective as an anti-fungal agent. Thus, instead of using six percent salicylic acid and twelve percent benzoic acid, have the druggist mix the full strength ointment with an equal part of petrolatum, reducing its strength by half. Do not use ammoniated mercury in a strength greater than five percent for fear of producing sensitivity. Do not use sulfur and mercury in the same area at the same time. Such a mixture will produce mercuric sulfide and leave black deposits on the skin. Finally, avoid the use of greases in hairy parts, especially in the groins and axillae. Hair follicles in these areas become irritated by greases which set up inflammation and often produce abscesses.

PYOGENIC INFECTIONS

Recent years have provided outstanding advances in the methods of treating pyogenic infections of the skin. In less than twenty years we have seen the introduction of a long line of sulfonamide drugs and antibiotic preparations. Some of these substances are useful only for external application. Some can be used either externally or internally. Some are best used only internally. Some are administered by injection. Some are given by mouth. Some may be administered either way. Some are more effective germ-killers than others. Some have greater sensitizing potential than others. Some are more dangerous than others. Some are more expensive than others. Obviously, therefore, in view of these many variable factors in the remedies, and the equally numerous variable factors inherent in the patient, one cannot be dogmatic in choosing one medication for any

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and all cases to the exclusion of all others.

Nevertheless, there are certain general principles which should guide us in our choice of a drug. First is the bactericidal or bacteriostatic effectiveness of the medication. This factor will, of course, be determined in part by the type of micro-organism encountered. In practice we find that a number of the preparations are almost equally effective, or near enough so that other factors may be permitted to determine the choice in many cases. For effectiveness, incidentally, we can give a high grade to our old friend ammoniated mercury as a topical agent of great value in many cases.

Next we consider the sensitizing potential of the product, and at this point is introduced a general principle of considerable importance. As a general rule it is unwise to use any agent topically which is also of importance as an internal medication. The reason is that the application of an agent on the skin may sensitize the patient to that product so that later it could not be used internally. This makes it unwise to use topically any sulfonamide or antibiotic which may have a wide and at times urgent use internally. The degree of the sensitizing potential may modify one's actions in special cases. In this regard it should be borne in mind that penicillin is a more active sensitizer than the other popular anti-biotic products. For topical use bacitracin and neomycin fulfill the requirements better than other agents. They are both very effective, both have very low sensitizing potentials, and are both used but very little internally.

I therefore can state that I prefer neomycin, bacitracin, and ammoniated mercury in that order for the topical treatment of pyogenic skin infections.

Internal medication is also of value in the treatment of pyogenic skin infections. Penicillin, aureomycin, and terramycin are most frequently used. The general principles governing the uses of anti-biotics will guide one in these cases.

SUPERFICIAL FUNGOUS INFECTIONS

Tinea capitis. In Arizona the commonest form of ringworm of the scalp is due to Microsporum lanosum (also known as M. canis or M. felineum.) This fungus has its normal habitat on some of our domestic animals such as dogs and cats. The organism does not thrive on the human body, and for that reason is relatively easy to eradicate. On the other hand, that form of ringworm of the scalp caused by M. audouini, which is quite infrequently seen here but is very common in other parts of the country, is at times extraordinarily difficult to cure. For the lanosum type of infection, treatment consists of manual epilation and the topical application of antifungal agents. I prefer an ointment containing three percent salicylic acid and five percent ammoniated mercury in a water-soluble ointment base. If the patient is unable to tolerate ammoniated mercury, precipitated sulfur is substituted for it. The newer agents containing fattty acids have not been useful in my hands. The hair should be clipped very short. The ointment is applied thoroughly over the entire scalp at bedtime, and is washed off completely in the morning. It is well to advise the child's mother that the treatment will have to be carried out for at least six months, or perhaps a year. Roentgen therapy is not necessary in cases of lanosum infection, but may be needed with the audouini type. The child may be permitted to attend school as soon as he is under treatment.

Tinea circinata. Ringworm of the body may occur in adults as well as in children. The lesions on the glabrous skin are usually easily eradicated by topical application of antifungal agents. A weak Whitfield ointment is very effective and usually well tolerated by the patient.

Tinea cruris et axillaris. Certain special rules govern the treatment of the skin of the axillae and groins. As stated above, it is unwise to massage greases into hairy parts, and this is especially true of the axillae and groins. Hair follicle abscesses occur frequently as a result of oils or greases being applied. Therefore a lotion is used in the treatment of tinea axillaris et cruris. A pleasant and effective lotion contains five per cent resorcin in 50 per cent alcohol. It is mopped on the affected part two or three times a day. The eruption is usually cured in two or three weeks. Some cases are recalcitrant. In such, superficial roentgen therapy is often applied.

Tinea pedis. Fungous infections of the feet vary greatly in their manifestations. For the interdigital variety (the so-called "athlete's foot") a half-strength Whitfield ointment is very satisfactory. It is massaged gently into the affected skin at bedtime and washed off in the morning. Secondary pyogenic infection is not

uncommon. It is treated in the manner described above for such conditions. Often a vesicular reaction will occur on the soles and palms ("id" reaction.) The larger vesicles are opened by cutting through them with a fine, sharp-pointed scissors. An exfoliating shake-lotion is applied frequently. A very satisfactory preparation is a zinc oxide shake-lotion containing one percent phenol, three percent liquor carbonis detergens, and five percent resorcin. Superficial roentgen therapy is most useful in many of these cases. Sometimes the infection becomes quite chronic and takes on hypertrophic characteristics. In such cases a modified Whitfield ointment or a crude coal tar ointment is used in conjunction with superficial roentgen therapy. Asterol is a new benzothiazole derivative which has been highly recommended. It, like the fatty acid preparations, has not, in my experience, produced outstanding results.

ACNE

In spite of the fact that many new suggestions have been made in recent years concerning the treatment of acne, dermatologists generally agree that none of them can supplant the conventional methods. Much has been written about the use of estrogenic substances in such cases. Although these agents seem to help somewhat in a few cases, they have not been found to be consistently dependable. Most dermatologists therefore have come to use them only as part of the treatment in only some of the patients. The same holds for the use of some of the antibiotics which have been recommended. Some patients seem to be benefitted somewhat by these agents, such as the cases of cystic acne which are helped by terramycin, but most are not. In general the agents mentioned above may be found useful in acne when there is some other indication for their use. The same may be said for other drugs such as iron, thyroid extract, and vitamin preparations.

Therefore we fall back on the conventional form of treatment. First, the patient's general health must be considered. Anemia, dental faults, and other abnormalities should be corrected. Health habits should be sensible. Adequate rest should be obtained. Moderate physical exercise is desirable. The diet should be adequate, but with the restriction of certain foods known to be undesirable for these patients. Fat, greasy foods are forbidden. Chocolate is forbidden because it is known to be specifically irritating to the pilosebaceous apparatus. Iodine is likewise irritating. Therefore the patient is warned against iodized salt and seafoods, the latter being very rich in iodine. Sweets as such are not forbidden, although they should be moderately restricted. Otherwise, dietary restrictions are not required.

Local treatment is very important. Of the drugs used externally, sulfur is the best. It is well used in the form of Lotio Alba, handed down to us from previous dermatological generations. Intraderm Sulfur Solution (Wallace) penetrates deeply into the follicles and is found to be helpful in many cases. Usually it is advisable to use a lotion rather than an ointment for the topical treatment of acne.

Included in the local treatment of acne is the general cleanliness of the skin and the emptying of comedones and pustules. Soap and water is the best method of cleansing the skin. A mild toilet soap is best. Medicated soaps are both unnecessary and undesirable. For unusually oily skins, chemical cleansing may be desirable. Seba-Nil (Texas Pharmacal Company) is a product found to be useful in this regard. It contains alcohol, acetone, and a sorbitan monolaurate derivative. A cotton pledget is moistened with this solution and wiped over the face thoroughly once or twice a day. An anti-seborrheic agent such as salicylic acid or resorcin may be added to the Seba-Nil. Mechanical expression of the contents of the comedones and pustules can and should be done by the physician, a few lesions being so treated at each office visit. The patient should be discouraged from carrying out this procedure at home for fear of damaging the tissues and thereby producing unnecessary scarring.

Superficial roentgen therapy still is the one modality at our command which stands head and shoulders above any other single method or combination of methods in the treatment of acne. This treatment should be given only by a dermatologist trained and experienced in its use. A course of twelve weekly treatments is given, each dose amounting to 50 or 75 roentgens. This amount of radiation is far under the average tolerated total. In fact, more such treatment may be given later to most patients if it seems to be desirable.

Most important of all, I wish to impress upon everyone the fact that acne treatment is successful in the vast majority of cases. It is im-

portant for all doctors who come in contact with such patients to urge them to submit to treatment. These young people need help. We must try to prevent dermal scars. We must also try to prevent psychic scars. The strain on the emotional make-up is tremendous. We have at our disposal good methods of treatment. Let us never tell such a patient that he or she does not need treatment, or that he will outgrow his condition. We must treat these young people. We must prevent scars.

SCABIES

The treatment of scabies has improved considerably in the last few years, not in its effectiveness, but rather in the fact that the modern treatment is easier and more pleasant for the patient to use. The oldfashioned sulfur treatment is perfectly effective, but it has been largely abandoned because of its messiness. Benzyl benzoate has proved to be somewhat unsatisfactory because it is highly irritating to the skin, especially in the presence of excoriations or secondary infection. Also it requires the very careful co-operation of an intelligent patient to insure its greatest effectiveness. Therefore one of the preparations containing the gamma isomer of hexachlorocyclohexane is now considered to be best. Gamiso Cream and Kwell Ointment are two such preparations. The patient is instructed to bathe and then apply the ointment over the entire body from the neck down. In infants the head must also be treated, for in them the infestation may involve all surfaces. The ointment is kept on overnight and washed off the next morning. A second application is made the following night in the same manner as before. On the morning after the second application the patient bathes and puts on clean clothes. All clothing and bedclothing used during and before the treatment must be boiled, ironed with a hot iron, or drycleaned and steam-pressed. All other persons who have been exposed should take the treatment at the same time. Children should be excluded from school until they have completed the course of treatment.

USE OF CORTISONE AND CORTICOTROPIN

Cortisone and ACTH have been found to be useful to a limited extent in a few common skin diseases. Their use in the more uncommon disorders does not concern us here. Psoriasis is one of the commoner conditions in which these hormones have been given extensive trial. The results have been disappointing, although some patients show a temporary favorable response. Atopic dermatitis (disseminated neurodermatitis) is a disease in which the hormones can be used to advantage at times. The severe exacerbations of the disorder can be helped. The patient can be helped over the rough spots, so to speak. But here again the benefit is only temporary. In the end we must go back to the conventional forms of treatment. Certain forms of urticaria seem to be cleared up entirely and permanently by this form of treatment. I speak especially of acute urticaria, and most particularly of that type which follows the administration of penicillin. The results at times are miraculous. Within six to twelve hours, often, the patient experiences relief. Usually two or three days of such treatment is sufficient to give complete and permanent relief. Eczematoid dermatitis (or nummular eczema) is another common trouble which at times shows excellent response to treatment with these hormones. Many times, of course, a complete cure is impossible. Nevertheless, there are some cases which, after a relatively short period of such treatment, clear up completely and presumably permanently. Finally, drug reaction should be mentioned as a group of conditions which at times respond dramatically to the use of these hormones.

This medication can be carried out in office practice. The cortisone is given by mouth. Usually tthe patient is ordered to take one tablet (25 milligrams) three or four times a day. Most of the time this dosage is reduced after two or three days. It is desirable to reduce the dosage as soon as possible to the smallest maintenance dose which will be effective. Sometimes as little as 12.5 milligrams once or twice a day will be sufficient. ACTH is available now in such form as to be usable on the ambulatory patient. Often, in office procedure, an injection of 40 milligrams of ACTH is administered at once to start the treatment, after which cortisone is ordered for the patient to take by mouth at home. Always, it should be remembered, the conventional methods of topical therapy are employed along with the hormone treatment.

QUOTANE AND SELSUN

There are two rather new preparations which

I wish to mention independently and in a somewhat isolated manner.

Quotane is a substance with a complicated chemical structure which has been found to be helpful in the relief of itching. It is available in ointment and lotion form. It acts as a mild surface anaesthetic. It has a low sensitizing potential. It is therefore useful in such conditions as contact dermatitis, neurodermatitis, pruritus ani et vulvae, and many others.

Selsun is a shampoo containing selenium sulfide as its active ingredient. It is an extremely valuable anti-seborrheic agent, and has become the drug of choice in the treatment of all forms of seborrhea capitis. It has a low sensitizing potential, although there are a few patients who are unable to tolerate it. It is easy and pleasant to use, and has an important place in modern dermatological therapy.

CONCLUSION

Time has been short, but an effort has been made to describe treatment which has proved to be successful for a number of skin diseases which are rather common, and which might be encountered frequently in the general practice of medicine. Also, certain therapeutic pitfalls have been pointed out, and means described by which they might be avoided. Practically all of the methods described here can be adequately carried out without specialized training or equipment, the only exception, in fact, being the use of superficial roentgen therapy. These modern methods are, in certain cases, far superior to those available to us in the past.

PHOENIX *Clinical* CLUB

MASSACHUSETTS GENERAL HOSPITAL CASE NO. 17431

The Case History in this discussion is selected from the Case Records of the Massachusetts General Hospital, and reprinted from the New England Journal of Medicine. The discussant under Differential Diagnosis is a member of the staff of the Massachusetts General Hospital. The other discussants are members of the Phoenix Clinical Club.

Dr. Even M. Gundersen*: *First admission.* This patient was a thirty-two-year-old married Canadian who entered the hospital for the first time on September 26 last year complaining of a skin eruption of four months' duration.

Four months before this admission he suddenly noticed the onset of a rash over his forehead. It was blotchy and purplish but did not itch. When he took a bath he noticed it on his chest and back as well. From the onset it was quite constant until admission and did not change in any significant way. Three months before admission he first noticed that one of his postauricular glands was beginning to swell. This disappeared spontaneously after a week. A week after that however several glands on the left side of his neck started to swell, and from that time he noticed enlargement of the glands in his groins also. One week before admission he first noticed constitutional symptoms in the form of slight weakness and fatigue on exertion. He had a few night sweats as well, but no fever so far as he knew.

He was seen in the Outpatient Department several times, in the Skin Clinic first, and was shown at the New England Dermatological Association. It was felt that this skin condition was mycosis fungoides. At a visit to the Male Medical Clinic, in addition to the enlarged glands in his axillary, cervical and inguinal regions it was found that the spleen was palpable one centimeter below the costal margin on inspiration. There was slight dullness at the right base with a few crackling rales. Several blood studies were undertaken there. On three occasions it was found that he ran a leukocytosis of 11,000 to 14,000. His smear was not remarkable except that there was an eosinophilia of 4 to 8 per cent.

His past history is essentially negative except for pneumonia sixteen years ago.

On admission he seemed to be well developed and nourished and in no distress. The skin of his forehead, chest and back was covered with a blotchy flat maculopapular purplish eruption, the lesions varying in size from the size of a dime to that of a quarter. There were pea-sized firm non-tender glands in the cervical, axillary and inguinal regions. In the axillary and inguinal regions the glands were matted together. There were fine consonating rales at

*Recently senior interne on the East Medical service.

both bases in the back, with dullness but no change in fremitus or character of the breath sounds. The spleen was palpable two centimeters below the costal margin on inspiration. The rest of the physical examination was negative.

On admission the white cell count was 21,000. There was no anemia, but the smear showed 40 per cent polynuclears, 48 per cent lymphocytes, 4 per cent myelocytes and 7 per cent eosinophiles.

A biopsy of the left cervical glands was done. He was discharged eleven days after entry.

History of interval. His first course of x-ray treatment was continued after discharge. He had three treatments per week for a month, then went back to work and felt fairly well except that he was weaker than usual. About Thanksgiving time on awakening one morning he noticed marked swelling of the face. His eyes were almost closed. He reported again at the Tumor Clinic. Another course of x-ray treatment was started. The swelling disappeared after two treatments. He was able to continue his work. About New Year's time however he noted swelling of the genitalia. He had another course of x-ray treatment. This swelling likewise disappeared. During January he was becoming much weaker. That was one month before his second admission. He was also dyspneic on exertion and had to give up his work. During the course of x-ray treatment in January he noticed that he was becoming very pale.

Second admission. On January 25 he had to be readmitted for this course of x-ray treatment because he was too feeble to be carried on as an ambulatory case.

Physical examination was essentially as it had been previously except for marked pallor. He appeared much sicker than at tthe previous entry. The spleen was palpable. The glands were about as before. The chest signs were as before. The liver was thought to be just palpable on inspiration.

X-ray treatment was continued. The anemia was getting very alarming. After eight days of treatment we decided to transfuse him. On that day however he had a fever of 102° by mouth and a rise in respirations to 40. He then showed definite signs in the right chest, chiefly in the upper lobe, signs of consolidation, quite obviously bronchopneumonia. There was no chill, and the picture was not characteristic of lobar pneumonia. This infection might have been picked up in the ward, because we had a few bad respiratory infections at that time. He ran a febrile course. The temperature rose to 104° and was 100° at the end. The respirations were rapid at first. They finally came down to 35 at the end. Six days before he died he had a severe pleuritic pain in his left chest posteriorly, and from that time definite signs of consolidation at the left base, later consolidation at both bases. He had made a very poor response in white blood cells, never over 12,000. His initial count was 8,000 at the second admission. On February 12 he died.

DR. W. WARNER WATKINS:

Summary of the Case History

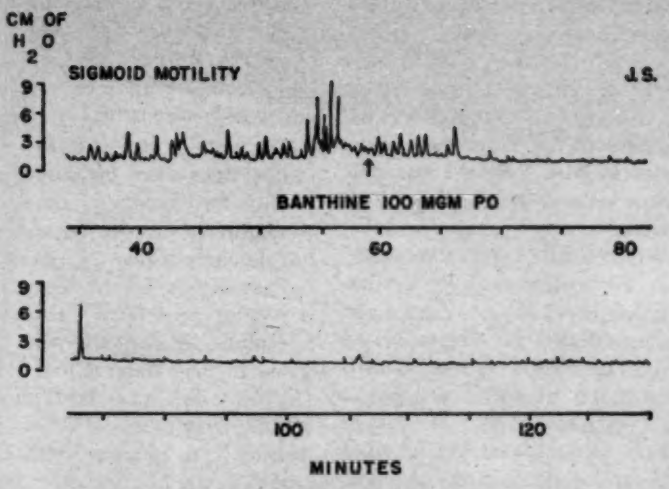
A 32 year old married man who, sometime in May of the year preceding his death, first noticed a skin rash on his forehead, this being blotchy and purplish, but did not itch. Being spring time in New England, he discarded his winter flannels and took a bath. This gave him a chance to look at his chest and back, and there he found the same sort of rash. The rash is said not to have changed significantly during the next four months, but maybe he didn't bathe again. Three months after first noticing the skin rash, a lymph node behind one ear enlarged but subsided spontaneously. However. nodes in the neck enlarged and then the glands in the groins became swollen.

A week before admission, he felt fatigue and weakness and had some night sweats without fever. In the Skin Clinic and before a Dermatologist Association, it was felt the condition was mycosis fungoides. In the Male Medical Clinic he was found to have enlarged cervical, axillary and inguinal nodes, and also an enlarged spleen. There was slight dullness at the right base with a few crackling rales.

(NOTE: The x-ray machine was either out of commission or else this case antedates the discovery of x-rays, since there was a positive indication for investigation of the chest and lungs by x-rays, at this point).

Several blood studies were made, but no details about the findings given, except note of leucocytosis of from 11,000 to 14,000, with 4 to 8 per cent eosinophiles. He entered the hospital on Sept. 26th, having lost four vital months so far as treatment is concerned.

Physical examination showed a well developed



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1. Kern, F., Jr.; Almy, T. P., and Stolk, N. J.: Effects of Certain Antispasmodic Drugs on the Intact Human Colon, with Special Reference to Banthine (β-Diethylaminoethyl Xanthene-9-Carboxylate Methobromide), Am. J. Med. *11*:67 (July) 1951.

2. Lepore, M. J.; Golden, R., and Flood, C. A.: Oral Banthine, an Effective Depressor of Gastrointestinal Motility, Gastroenterology *17*:551 (April) 1951.

RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

and well nourished man, in no distress. The forehead, chest and back were covered by a blotchy, flat, macolo-papular purplish eruption, with lesions varying in size from a dime to a quarter. There were pea-sized, non-tender, nodes in cervical, axillary and inguinal regions, being matted together in the latter two areas. Rales at both bases in back. Spleen was palpable, which means enlargement. (X-ray machine still not working).

Blood count: White cells 21,000, 40% polys, 48% lymphocytes, 4% myelocytes, 7% eosinophiles. Biopsy of left cervical node was made and this doubtless established the diagnosis, and he was started on x-ray treatment, four months late. Only details of this treatment are that it was three times a week for a month. No dosage is given, nor locations of fields radiated, whether the enlarged nodes or the skin lesions, or whole body radiation. He improved and returned to work, though feeling weaker than usual.

After about a month, or around Thanksgiving, he woke one morning with face swollen enough to close his eyes, doubtless from pressure of cervical nodes on veins or lymphatics of neck. Further x-ray treatments, without details, except that it was effective in reducing this swelling of the face. He went along about another month, and then the inguinal nodes apparently enlarged, as the genitalia became swollen, and this swelling subsided after further x-ray treatment, no doubt to the inguinal nodes.

During January he became dyspneic on exertion, grew much weaker and had to give up his work. Diagnostic x-ray machine was still not working.

On Jan. 25th he re-entered the hospital to continue x-ray treatment. After eight days of treatment, and while they were contemplating blood transfusions for the profound anemia which had developed, bronchopneumonia or some other type of lung involvement wrote "FINIS" to his troubles on Feb. 12th.

My first inclination, on reading over this case history, was to by-pass the normal purpose of these discussions, which is to attempt a diagnosis, and digress into a review of the present status of the treatment of the lymphomas, by the three methods which are now being used or which are under research investigation. These are, (1) the application of x-rays externally, by several technics, including whole body radiation; (2) the internal irradiation by radioactive isotopes; and (3) chemotherapy with nitrogen mustard, TEM, aminopterin, ACTH, and other synthetic chemicals. However, interesting as that would be, I have resisted that temptation, and will follow the more or less familiar patttern of our weekly discussions.

This patient had a disease in which the first visible signs were on the skin of the face and trunk. Two groups of observers diagnosed the condition as mycosis fungoides. To reject the unanimous opinion of eminent New England dermatologists would seem to be a very disrespectful procedure. However, we have the advantage of knowing what the course subsequent to their observation was. Also, we know Dr. Judge Phillips, who is an excellent exemplar of the admonition,'—"When the Greeks come bearing gifts, be very watchful of the hand concealed in the hip pocket." So, it would be very much out of character for Judge Phillips to present us with a case carrying a gratuitous diagnosis, unless he just wants a discussion of a very interesting condition. I am inclined just to smell that bait,—and pass on.

A bird's eye view of this case indicates that it belongs to that group of diseases which Anderson calls "dermatopathic lymphadenopathies," which covers a lot of territory. The rapid response to x-ray therapy narrows the field of possibilities down to the radiosensitive lymphomas of malignant type. The malignant lymphomas with skin manifestations which must be considered are,—(1) Mycosis fungoides, (2) Hodgkin's Disease, (3) Lymphosarcoma or leukosarcomatosis, (4) the Leukemias, (5) Lymphocytoma or Spiegler-Fendt's sarcoidosis of the skin.

In the differential diagnosis, the choice of any of these must needs satisfy four criteria,—(a) the skin lesions, (b) the lymph node and splenic enlargements, (c) the blood findings, and (d) the clinical course which includes the response to x-ray treatments. Proceeding from the less likely to the more likely:—

Lymphocytoma, or Spiegler-Fendt "sarcoid" of the skin, is mentioned and discarded without discussion, since its manifestations do not fit all the criteria. We recognize the existence of such a disease, because it is just the sort of crazy case which a jocular pediatrician would enjoy dropping in tthe laps of a dermatologist, an ophthalmologist and a radiologist,—and watch them squirm.

Leukosarcomatosis or Lymphoscarcomatosis, according to Anderson, is a condition in which there is more or less localized lymph node enlargement, associated with skin infiltrations. The skin lesions are usually nodular rather than flat or macular. When the infiltration spreads within the skin, it still produces lumpy areas. Usually the lymph nodes enlarge before any skin lesions develop, though this order may be reversed. There is no characteristic blood picture in lymphosarcoma. When anemia does develop it is usually normocytic, but eosinophiles and monocytes are common.

Leukemia, whether lymphatic or myelogenous, may be acute, subacute or chronic. The time interval would put our case in the subacute class, and in that group the type is frequently subleukemic or aleukemic, with blood counts 15,000 or below, and with a few immature cells in the blood smears. In our patient, the blood count on admission showed a leucocytosis of 21,000, with a decrease in the polynuclears and a relative lymphocytosis. At that time there was said to have been no anemia which is taken to mean the red count and hemoglobin were normal. Shortly, there was rapid development of anemia. The 4% myelocytes and 7% eosinophiles deserve consideration. Myelocytes do not normally appear in the blood stream, and certainly not to the extent of 4%. When present in such numbers, it becomes necessary to exclude myelogenous leukemia. With a blood count and cytology which are suggestive but not conclusive, a bone marrow study is indicated. The clinicians in charge apparently were satisfied that this was not leukemia, but it seems to me they dismissed this possibility without sufficient consideration. Skin lesions may occur in any of the leukemias. They present characteristic tumor-like infiltrations in well circumscribed areas which vary much in size. They may be located beneath the skin surface with reddish or brown discolorations over them. They may occur in plaque formation. The most common site is the face, but lesions may develop on the trunk or extremities also.

Mycosis fungoides, or granuloma fungoides, must not be discarded just because we suspect the gratuity of the diagnosis. The New England dermatologists may even have been right! This condition is described as having three clinical stages,—the premycotic, the infiltrative, and the fungoid. There is much interesting variation in the lesions in these three stages, which time does not permit me to discuss in detail. In the infiltrative stage, there are firm, slightly elevated, bluish-red plaques, and those described as shown by our patient would be consistent. The fungoid stage follows the infiltrative by several months, with tumefactions in the skin up to ten cm. or more in diameter. There may be lymph node enlargement, and visceral invasion including the spleen. There is usually severe pruritus, which was absent in our patient,—a fact of diagnostic significance.

In Lymphogranulomatosis or Hodgkin's Disease, as it well known, the lymph node enlargements are the prominent features of the condition, but skin lesions are frequent and sometimes the most striking manifestations of the disease. Usually the skin lesions develop late in the disease, but can show up early, and in rare cases are the only visible evidences of Hodgkin's. The appearance of the skin lesions of mycosis fungoides and of Hodgkin's are very similar, and differentiation by clinical evidence or histologic examination of involved lymph nodes is required,—as apparently was the case with our patient.

Any diagnosis chosen in this case must be consistent with the clinical course, the salient points in which were,—

The rapid course of mine months.

The appearance of a blotchy, purplish rash on the forehead, and then on the chest and back, as the first presenting symptom.

Lymph node enlargements, first post-auricular, then cervical, axillary and inguinal.

Quick response of lesions to radiotherapy, with rapid recurrence also.

Evidence of visceral involvement, especially splenic, possibly pulmonary, with weakness and anemia.

Leucocytosis with some abnormal cells and a relative lymphocytosis.

Terminal lung involvement, diagnosed bronchopneumonia, but thtis could have been invasion of the lungs by the lymphoma. X-ray examination would have given valuable information.

We are, therefore, ready to check the field of entrants in this diagnostic horse race, to see whether these several candidates can qualify, or should be scratched.

We have already scratched lymphocytoma or Spiegler-Fendt's sarcoid.

Lymphosarcomatosis: The facts that this ought not to begin with a skin rash; that the lymph nodes should be larger than pea-sized; that the clinical course should not be so rapidly fatal under x-ray treatment; that the blood pictture is atypical for lymphoscarcoma unless there is bone marrow involvement,—make this entrant a long shot and only gamblers who like 25 to one odds would bet on this diagnosis.

Leukemia of the subleukemic variety cannot be brushed off as readily as was apparently done in this case. It can start with a skin rash, then develop enlarged lymph nodes and terminate by visceral involvement of spleen and liver. However, the skin lesions are usually different in appearance from those described. The blood picture is the main evidence favoring this diagnosis, and if we are going to pay any atttention to the blood counts, we will need to give serious consideration to subleukemic leukemia. We accept this entrant at ten to one odds.

Mycosis fungoides was the favorite in the first heat of this race, and everybody was betting that way. However, there were some doubts, because they had a cervical biopsy and the results of that probably changed the odds. They started x-ray treatments but that does not mean much, since that is the appropriate treatment in any of the lymphomas under consideration. The lesions of mycosis fungoides are even more radiosensitive than those of Hodgkin's disease. Enlargement of the lymph nodes is not usual with mycosis fungoides and is the main argument against it. However, enlarged nodes and visceral involvement are sometimes found in this condition, and could alter the blood picture. These doubts increase the odds on this entrant to about four to one.

Hodgkin's disease, therefore, takes the place of favorite in this race, with even odds. This case closely resembles one which Dr. Frissell and I struggled with for a year. The patient, a young Phoenix lawyer, first went to Dr. Cruthirds with a submaxillary swelling, which the doctor aspirated and submittted material for cytologic study. Abnormal cells were found which suggested that tthe swelling was probably a lymphogranuloma or Hodgkin's. Biopsy of the node confirmed this. Only a single node was palpable at that time and this disappeared after x-radiation. Cervical nodes on the opposite side next enlarged and about tthe same time skin lesions began to appear, first on the face and then on the chest and back. These were fairly well circumscribed brownish plaques or tumefactions. These would promptly disappear with moderate doses of x-ray, but new ones began to develop faster than we could safely treat them. Axillary and inguinal nodes enlarged and subsided under x-ray treatment. Patient developed anemia with a leukopenia. He went to Mayo Clinic, where diagnosis was confirmed, and treatment given there to liver and spleen, on account of jaundice and splenomegaly. There were also some pulmonary infiltrations. He was given some nitrogen mustard at Mayo's, but neither this nor further radiation halted his downhill progress and fatal cutcome. In our patient under discussion, the altered blood picture would probably be best explained,—if Hodgkin's is being considered,—as due to invasion of the bone marrow by the disease.

These entrants, therefore, line up at the post about as follows:—

Favorite and first choice with odds even,—Hodgkin's disease, with skin manifestations, visceral and bone marrow invasion and possibly lung involvement.

Second choice,—odds four to one,—Mycosis fungoides.

Third choice,—odds ten to one, Subleukemic leukemia.

Fourth choice,—25 to one long shot,—Lymphosarcomatosis.

DR. LOUIS G. JEKEL

In my efforts to analyze the data presented here I wish first to discuss the skin lesions. These are, it seems to me, rather non-specific. They are described as a "blotchy, flat, maculopapular eruption." I do wish, here and now, to point out that if they have any papular element (and they are said to be maculo-papular) they cannot be flat, for a papule is a raised lesion. It is seen, therefore, that the description of the skin lesions is not helpful to me. I probably would not have considered mycosis fungoides at all had it not been mentioned in the protocol. Certainly the description offered here is not that of mycosis fungoides. One might think of lupus erythematosus when reading the description in the protocol. However the course of the disease in general, the lymph node involvement, the leucocytosis, and the fact that the patient received x-ray therapy all argue

against lupus erythematosus. The eruption could be that of one of the lymphoma group of Hodgkin's Disease, leukemia, lymphosarcoma, etc. for these conditions may present indefinite and variable rashes, sometimes as specific types and sometimes as non-specific toxic rashes. From these facts it can be seen that the diagnosis of this case cannot be made from the skin lesions. As a matter of fact this part of the examination does not help me at all. And why, or why, was there not a biopsy of the skin?

Next I wish to discuss the lymph nodes. The examination of these does not help me either. The diagnosis was made, no doubt, by the lymph node biopsy, but the results are carefully hidden. I believe, though, that the lymph gland enlargement and the fact that a lymph gland was biopsied—and the result hidden from us—and the fact that tthe patient received x-ray therapy all indicate that the patient suffered from a lymphoma. Leukemia seems to be ruled out by the blood picture, so we must consider Hodgkin's disease, lymphosarcoma, giant follicle lymphoma, reticulum-cell sarcoma, lymphocytoma, lymphoblastoma, plasmocytoma, and endothelioma. Of course, any physician in charge of such a patient would have to depend finally on the microscopic studies of the lymph glands, and there is nothing very specific about the physical examination of the lymph glands in this case.

Now let us consider the blood picture. Our patient showed a fairly consistent moderate leukocytosis until the terminal phases of the disease when a relative leukopenia appeared. However, it was not a leukemic blood picture at any time. Eosinophils were slightly elevated, at one time being 7%. Four percent myelocytes were present once. These findings are consistent with Hodgkin's Disease. However, one time there were 48% lymphocytes with only 40% polys. This is *not* the picture of Hodgkin's Disease which usually shows a polymorphonuclear leukocytosis. In general therefore I think we can say that the blood picture is non-specific with whatever leaning there may be going toward Hodgskin's Disease.

Now let us look at the patient. His age of thirty-two is against the diagnosis of lymphosarcoma, and favors Hodgkin's Disease. The rapidly progressing downhill course definitely does not favor the diagnosis of giant follicle lymphoma. Yet, even when looking at the patient as a whole, we do not find specific factors which will definitely give the diagnosis. He had, apparently, some pleural effusion; he probably died finally with a terminal bronchopneumonia. It is too bad that we are told nothing about the chest x-ray, for surely one was made. Was there tuberculosis? We do not know, but the generalized lymph gland enlargement is not like that of tuberculous lymphadenitis which is more apt to be localized. Was there mediastinal involvement? I'll bet there was.

I believe the two most important examinations that were made on this patient were (1) the lymph gland biopsy, and (2) the x-ray of the chest. The results of these tests are withheld from us—for obvious reasons.

Gentlemen, you can see that I believe it is impossible to establish the diagnosis of this case with certainty from the clinical aspects as given in the protocol. Let me mention the conditions I have considered. (1) Tuberculosis; we have no chest x-ray, and no tuberculin test, and no skin biopsy. (2) Mycosis fungoides: we have no skin biopsy. (3) Hodgkin's Disease. I read too much and got myself confused by learning that some authors divide Hodgkin's Disease into three separate entities, namely Hodgkin's Paragranuloma, Hodgkin's Granuloma, and Hodgkin's Sarcoma (Jackson and Parker: *Hodgkin's Disease and Allied Disorders*, Oxford University Press, New York, 1947.) I have depended largely on the aforementioned monograph in studying this case and I wish now to quote from it: "In the last analysis, the diagnosis of any type of Hodgkin's Disease must rest on a properly executed biopsy." (4) Reticulum-cell Sarcoma. Again I quote from Jackson and Parker: "It is doubtful whether a clinical diagnosis of reticulum-cell sarcoma can be made with any degree of certainty." (5) Lymphocytoma and lymphoblastoma. Again I quote from the same source: ". . . if a patient has . . . lymphadenopathy but an essentially normal blood picture, a biopsy is necessary for a correct diagnosis. One cannot otherwise distinguish such enlarged lymph nodes from those involved by Hodgkin's Disease, giant follicle lymphoma, reticulum-cell sarcoma, or tuberculosis, nor, for that mattetr, from any other conditions." (6) Lymphosarcoma. This disease in a 32 year old patient would be a rarity. (7) Giant follicle lymphoma. Quoting again from Jackson and Parker: "It is obvious, therefore, that the

diagnosis can be made only by careful histological examination of an excised lymph node." (8) Plasmocytoma — obviously the plasma cell can be identified only on microscopic examination. (9) Endothelioma. Quoting again (same source) "endothelioma should be tolerated neither as a clinical nor as a biopsy histological diagnosis; only a complete autopsy demonstration of the absence of an occult primary carcinoma justifies the adoption of this diagnosis." (10) Next to consider is a leukemia. The blood picture is not that of leukemia although one count of 48% lymphocytes is perhaps suspicious of the lymphatic type of leukemia. We must remember, too, that a leukemia may accompany any one of the other lymphomas. (11) Sarcoidosis must be mentioned. It is not a fatal disease and we do not have much evidence here to support that diagnosis. X-rays of the chest and bones and biopsy of the skin would help.

Obviously, gentlemen, from what I have said you can see that I do not put any faith at all in a clinical diagnosis in this case. But we are required to give something. Therefore I offer as my diagnosis:

1. Hodgkin's Disease.
2. Bronchopneumonia—Terminal.

CLINICAL DISCUSSION

Dr. William B. Breed: I came on service just two days before he developed his respiratory infection. It was perfectly obvious that he had developed bronchopneumonia, rather diffuse. There was some question at first whether it was straight lobar pneumonia. There was no way of determining which it was. We felt at the time that he probably had picked up this epidemic respiratory infection which was going about the ward.

Dr. Wyman Richardson: Was that after he was transfused?

Dr. Gundersen: It was on the day when he was transfused.

Dr. Richardson: Before or after the transfusion?

Dr. Gundersen: Shortly after it.

Dr. George W. Holmes: The interesting thing from the x-ray point of view is that he did not show any of the characteristic large mediastinal masses that we usually see in lymphoblastoma, although he did have some enlargement of the hilus shadows.

The film on your right shows some evidence of pleural thickening, but that was quite early in the disease. There is enlargement of the hilus glands and that is about all.

In the second film, which is taken with the patient lying on his back, there is diffuse mottling over the descending bronchi on both sides and enlargement of both hilus shadows, but that is not characteristic of untreated Hodgkin's disease or lymphoblastoma. In cases where the lungs are infiltrated with lymphoblastoma we sometimes get this picture. As he neared the end he developed anemia. I do not think this is different from the usual late cases. They do not respond well.

Dr. Tracy B. Mallory: On the whole he made very little response; at least his response did not last any considerable time.

Dr. Holmes: No; it was a very short remission.

We looked up some cases with temperature and we did not find any relation between temperature and treatment. Certainly the treatmen did not affect the temperature in any way. I think a person with severe anemia does not do well. I do not think that the anemia this patient had was due to treatment; it was probably due to the disease.

Dr. Francis T. Hunter: This man showed an interesting type of lymphoblastoma because he did not look like the usual type of mycosis fungoides that we see with areas of infiltration in the skin clearing in the center. Secondly, here is a man who noted the first symptoms last June. He died in February. Why he did not behave as the majority of these patients do, I do not know. Mycosis fungoides in general may go for years. It is from three to six years before deep gland involvement appears. Out of ten postmortem cases of mycosis fungiodes eight had generalized enlargement of the liver, spleen, etc. Of the other two, one died within three years of septicemia and pneumonia and the other turned out not to be lymphoblastoma but myeloblastoma. I think from the medical point of view it might be a good thing to illustrate a few of the skin manifestations of this disease. I have collected six cases from the Skin service with photographs which show the various types of skin involvement.

Dr. Edward D. Churchill: I notice that during the course of this terminal infection his white cell count did not rise above 11,000. Was that due to the effects of x-ray?

Dr. Hunter: No. I should have expected

from the few myelocytes he had that marrow was involved.

CLINICAL DIAGNOSIS

(From Hospital Record)

Lymphoblastoma (mycosis fungoides).
Bronchopneumonia.

ANATOMIC DIAGNOSIS

Malignant lymphoma.
Lobar pneumonia.

PATHOLOGIC DISCUSSION

Dr. Mallory: At autopsy we found very little evidence of the skin lesions present. It is quite surprising how a very marked skin lesion can apparently disappear entirely postmortem. So much of its prominence depends on local congestion that it may not be at all evident at the postmortem table. We found only a slight remnant of the macular rash on the forehead.

Within the body we found slight but very diffuse enlargement of all the lymph nodes. The mesenteric glands were all three or four millimeters in diamter, definitely a little larger than normal. The retroperitoneal glands were a little large. The bronchial glands were not particularly hypertrophied. A very unusual feature, it seemed to me, was a diffuse induration of the entire mesentery and all the retroperitoneal tissues. Thy were white and very firm and did not appear definitely neoplastic. It seemed more like a chronic inflammatory process. The sections however proved that it was all neoplastic infiltration.

The liver was slightly enlarged. The portal areas were prominent and showed microscopically marked infiltration. The kidneys were not noticeable in gross, but microscopically also showed tumor infiltration. The spleen was moderately enlarged, 230 grams.

The lungs showed a pneumonia, lobar in type, in the upper lobes with bilateral collapse in both lower lobes. Again we could find no tumor infiltration in the lungs.

The blood cultures showed a hemolytic streptococcus, a finding which was of some interest because at that time nearly half the patients in the ward in which this man was had sore throats and positive hemolytic streptococcus cultures. It apparently was not a very virulent strain of organism, but two patients who died that week when the epidemic was present showed hemolytic streptococcus septicemia. They were both very weak. One had anemia; the other was a very old cardiac.

The question comes up how to classify this case. Pathologists and dermatologists have had a long-standing argument, not settled yet, as to whether or not mycosis fungoides is a manifestation of lymphoblastoma. The majority of pathologists in this part of the country say it is a manifestation of lymphoma. The great majority of dermatologists say no. The average case of mycosis fungoides is very difficult to diagnose histologically from cut sections. The cases show a rather wide variety of cells and not a straight-forward picture of lymphoma. After a great deal of deliberation we generally decide it is lymphoma, and usually when the cases come to autopsy we find diffuse involvement of most of the organs in the body that confirms our opinion. The lymph node removed from this man for biopsy showed a perfectly typical small round cell lymphoma, a very well differentiated type. The same is true of all the various areas which we found involved at autopsy. It was a perfectly typical involvement by lymphoma over which no one could argue. The terminal distribution suggests the distribution we find in leukemia, although there was at no time any evidence of leukemia in the blood stream. It is not typical mycosis fungoides. I think it is a different type of lymphoma. I will show you the sections on it, though the histologic differentiation of these lesions depends on pretty minute characters of the cells which I cannot bring out with the projection machine.

Dr. Holmes: Was there any involvement of the bone marrow?

Dr. Mallory: I think there unquestionably was. It looked grossly abnormal. Unfortunately the tissue has been lost, so I have no histologic confirmation.

Dr. Holmes: I think you have explained why he did not get well under x-ray treatment, —because it was so widely distributed. It was hopeless at the start. The question is whether we ought to radiate cases of that type at all.

THE Secretary's MESSAGE

REPORT ON HEALTH NEEDS OF THE NATION

IT IS TIMELY TO OBSERVE THAT THE PRESIDENT'S COMMISSION ON THE HEALTH NEEDS OF THE NATION IS NOW EMBARKING ON ITS BIGGEST TASK: THAT OF DRAFTING AND COMPILING ITS FINAL REPORT AND RECOMMENDATIONS WHICH, CHAIRMAN PAUL B. MAGNUSON SAYS, WILL BE READY BETWEEN DECEMBER 1 AND 15.

AMA REPORTS THAT THE COMMISSION SET TO WORK ON THE REPORT AFTER HEARING TWO DAYS OF TESTIMONY, IN WASHINGTON, ON THE CONTROVERSIAL PROBLEM OF FINANCING MEDICAL CARE. A COMPREHENSIVE SUMMARY OF TESTIMONY PRESENTED AT THIS MEETING APPEARED IN THE WASHINGTON NEWS SECTION OF THE AMA JOURNAL, OCTOBER 18 WHICH YOU SHOULD READ.

THE FIRST REPORT TO BE GIVEN OUT BY THE COMMISSION WILL BE A 100-PAGE SUMMARY ON "THE STATE OF THE NATION'S HEALTH."

THIS SUMMARY WILL BE QUICKLY FOLLOWED BY PUBLICATION OF THE FOLLOWING DOCUMENTS: ABOUT 500 PAGES COVERING THIS NATION'S HEALTH STATUS, NEEDS AND RESOURCES; A STATISTICAL APPENDIX ON HEALTH STATUS, GIVING TABLES AND CHARTS; A STATISTICAL APPENDIX ON THE FINANCING OF HEALTH SERVICES, PERSONNEL, EDUCATION AND RESEARCH, AND EXCERPTS FROM REGIONAL PUBLIC HEARINGS.

MOST OF THE WRITING OF THE REPORT WILL BE DONE BY THE COMMISSION'S STAFF IN WASHINGTON. THE EDITING AND WHATEVER REWRITING IS NECESSARY WILL BE DONE BY H. B. VAN WESEP, WHO HAS BEEN HEAD OF THE OFFICE OF PUBLICATIONS OF THE ROCKEFELLER FOUNDATION IN NEW YORK FOR 25 YEARS. HE WILL GO OVER THE MATERIAL AS IT IS TURNED OUT BY THE COMMISSION'S STAFF AND PUT IT IN FINAL SHAPE FOR THE PRINTER.

Editorial

ARIZONA MEDICINE

Journal of

ARIZONA MEDICAL ASSOCIATION, INC.

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CONTRIBUTORS

The Editor sincerely solicits contributions of scientific articles for publication in ARIZONA MEDICINE. All such contributions are greatly appreciated. All will be given equal consideration.

Certain general rules must be followed, however, and the Editor therefore respectfully submits the following suggestions to authors and contributors:

1. Follow the general rules of good English, especially with regard to construction, diction, spelling, and punctuation.
2. Be guided by the general rules of medical writing as followed by the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. (See MEDICAL WRITING by Morris Fishbein.)
3. Be brief, even while being thorough and complete. Avoid unnecessary words. Try to limit the article to 1500 words.
4. Read and re-read the manuscript several times to correct it, especially for spelling and punctuation.
5. Submit manuscript typewritten and double-spaced.
6. Articles for publication should have been read before a controversial body, e.g., a hospital staff meeting, or a county medical society meeting.

The Editor is always ready, willing, and happy to help in any way possible.

EDITORIAL

DIABETES DETECTION DRIVE

The week of November 16th to 22nd is National Diabetes Week. It is sponsored by the American Diabetes Association. Its aim is to make the community "diabetes conscious" and to inform the population of the problem of undiscovered diabetics in their midst.

The American Diabetes Association is an organization composed primarily of physicians who are deeply concerned with the diabetes problem. The association has promulgated a continuous, year-round Diabetes Detection Drive directly sponsored and conducted by local physicians through their medical societies.

Diabetes is a disease which presents urgent problems not only to the internists and general practitioners, upon whom the responsibility for the management devolves, but also to the specialists in many other fields. It may be correctly defined as the *disease of complications* since so many other ailments find the diabetic a particularly easy prey.

The magnitude of the problem is increased twofold by the fact that in addition to the approximate million known diabetics now under treatment, there is an estimated additional million in this country whose illness has not yet been discovered and, consequently, is not controlled.

It is essentially the physician's function and duty to discover the hidden diabetic, just as it is his task to supervise the treatment of those whose disease has been diagnosed.

As the Diabetes Detection Drive enters its fifth year, greater emphasis is being placed on the health education aspect of the program, as is evidenced by the fact that the function of the National Committee on Detection and Education has been broadened to include education as well as discovery.

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COMMITTEE ON SCIENTIFIC PROGRAM, 19th ANNUAL MEETING

The Nineteenth Annual Meeting of the American College of Chest Physicians will be held at the Hotel New Yorker, New York City, May 28-31, 1953.

Physicians who wish to present papers at the meeting should submit titles and abstracts to Dr. Arthur M. Olsen, Chairman, Committee on Scientific Program, American College of Chest Physicians, Mayo Clinic, Rochester, Minnesota.

MAKE RESERVATIONS NOW

FOR THE

FORTY-NINTH ANNUAL CONGRESS

On

MEDICAL EDUCATION AND LICENSURE

Monday and Tuesday, Feb. 9-10, 1953

Red Lacquer Room

Palmer House

Chicago

The Annual Congress on Medical Education and Licensure is conducted under the auspices of the Council on Medical Education and Hospitals of the American Medical Association and the Federation of State Medical Boards of the United States.

In addition, the following open meeting will be held at the Palmer House immediately preceding the Annual Congress on Medical Education and Licensure:

Sunday, February 8 — 9:00 a.m.-12:30 p.m.
Open Meeting of the Advisory Board for Medical Specialties

It is important to refer to the Annual Congress on Medical Education and Licensure when writing to the Palmer House for your reservation

IMPORTANT NOTICE TO ALL

PUBLIC HEALTH SERVICE "RESERVISTS"
SPECIAL REGISTRATION — P. L. 779

It is absolutely essential and compulsory by law that all individuals—**Reservists,** "active" or "inactive", in Public Health Service, coming under the provisions of P.L. 779, Special Registration (Medical, Dental, Veterinarian and allied specialist categories), must REGISTER with their respective local Selective Service System Board. If you have not already done so — do so TODAY.

TOPICS OF *Current Medical* INTEREST

RX, DX, AND DRS.

By GUILLERMO OSLER, M.D.

The new COMMITTEE ON TUBERCULOSIS, appointed by Governor Pyle, is a good result of a wise idea. . . . The State Tuberculosis and Health Association is responsible, and the committee seems to be a solid one. . . . The problem is changing, but still needs a solution, as we have said here several times. A fact-finding group should have been set up long ago, but no one would have believed them in past years. . . . Their findings, and a logical plan for a solution of the problem will not satisfy everyone, but the doctors, the rest-homes, the merchants, the Board of Health, the Legislature, and the Governor should all be more receptive than ever before.

Did you know that you may have any one of nine specialty journals in place of the J.A.M.A.? . . . You may make that change, and have a new and adequate life, by getting your general medical news from ARIZONA MEDICINE, and TIME Magazine, and your specialty news from one of the several journals.

One of the awards in the Mississippi Valley Medical Society contest went to Dr. Lawrence Craven of Glendale, Calif. He described the potential value of a drug in the PREVENTION OF CORONARY TROMBOSIS. The synthetic, non-exotic, ordinarily analgesic and antipyretic drug is ASPIRIN. . . . He believes that it works like dicumarol in preventing coagulation in the vessels —a fact demonstrated 10 years ago at the Wisconsin General Hospital. . . . His evidence is presumptive, since it depends on the absence of attacks during a 7 year period in 1,465 patients (considered to be likely candidates for coronaries) who were treated with 1 to 2 tablets of aspirin several times a day. . . . It has also seemed to prevent recurrences in a small series of coronaries. . . . He recommends the regular use of aspirin by those between 45 and 65, with certain characteristics, and who lead a sedentary life.

The ACTION OF ANTIBIOTICS on bacteria has been thought to be an interruption of metabolism. . . . The International Congress of Biochemistry (Paris, July 1952) heard the theory that penicillin and broad spectrum antibiotics inhibit the bacterial synthesis of protein and nucleic acid. Individual differences exist, however. . . . Streptomycin produces an effect on the oxalacetate-pyruvate reaction, and the effect is lost when the bacteria develop SM resistance.

The huge circulation of 'This Week' Magazine, a Sunday paper supplement, has been used to lay the ghost of a story about Eisenhower's health. . . . It is an article called "How Healthy Are They?", ostensibly about both candidates, as told by their physicians. Since no question has been raised about Adlai, one will get you five that it has to do with Ike's blood pressure. . . . A question-and-answer series very obviously includes information on his usual range of pressures (120 to 140 systolic), with occasional elevation to 156/96. Response to exercise was normal. . . . Both candidates are otherwise normal, tho they need to restrict their diet.

One of the smaller drug manufacturers on the west coast speaks of the SULPHUR in its own compound in the following terms,—"a pearl of great price and the most desirable of medicines". . . . Paracelsus had little idea, when he wrote the words in 1530, that they would be used to sell a brand of CALSULFHYDRYL 400 years later.

This drug, incidentally, is the pet of Dr. Archie Cruthirds of Phoenix. He made TIME Mag. in October 1946 with the use of Hydrosulphosol for eye burns, made it again during October 1952. The present case is a child with corneal scars. The present drug has calcium added to the previous compound.

The public prints have pretty well exhausted the story of the Tucson scientist who helped 'solve' a 1930 CHICAGO KIDNAPPING by the use of DENTAL CASTS. . . . Dr. Bertram Kraus, U. of A. anthropologist, selected the casts of a Mary McClelland from those of 39 women as the only ones which were compatible with those of the Moroney family. . . . The story was a natural, with crime, science, and mystery all confused. The confusion persists, since the McClelland woman's life history doesn't exactly fit the kidnapping dates.

The late Alexander Woolcott used to end his stories with a punch-line, carefully saved for that spot. . . . This month's news on FLUORIDATION OF PUBLIC WATER-SUPPLIES comes from California. It says that two cities have just started to add fluorides. Antioch, a community of 11,000 people, has joined the modern parade. Antioch is in Eastern Contra Costa County. . . . Oh, yes. There was another city up north which has also started on the program. A place called San Francisco.

Who would be silly enough to use VITAMIN B 12 only for pernicious anemia? It has recently been reported that,—1. Pain in 13 cases of TRIGEMINAL NEURALGIA was eliminated by 1,000

micrograms of B 12. 2. OSTEOARTHRITIS and OSTEOPOROSIS (33 cases) were improved by 30 to 900 micrograms of B 12, (tho testosterone is more commonly used in osteoporosis). 3. Four patients with chronic discoid LUPUS ERYTHEMATOSUS responded to as little as 15 micrograms of B 12. (One could add a No. 4, since the compound is used to produce growth in animals). . . . Small numbers all, but maybe they are indications of indications.

Merck reports a trade preparation Mephyton, an EMULSION OF VITAMIN K_1. The drug is used to correct a prolonged prothrombin time, sometimes with hemorrhage, following use of Dicumarol. It is not effective after use of heparin. . . . The ordinary Vit. K preparations do not act rapidly enough. Vit K_1 is usually not available, but the emulsion can be given IV. The action is said to begin in 15 minutes, with correction of the defect in 3 to 6 hours. . . . This rapid effect allows surgery to be done with less delay, and no transfusions, after previous use of dicumarol.

The A.M.A. feels that the International Labor Organization is a huge mechanism for promoting SOCIALIZED MEDICINE. If the U. S. Senate should ratify the newest ILO Convention (Treaty) on Minimum Standards of Social Security, we would be stuck with socialized medicine, and from the outside.

Dr. C. Thomas Read of Phoenix is the author of a timely paper in the Journal of Thoracic Surgery for September 1952. (He read it at the Dallas meeting of thoracic surgeons in May of this year). . . . The title is "The Use of SK-SD (Varidase) in the Management of Early Postoperative Partial Pulmonary Resections". . . . You may be able to beg a reprint for the details, but the special angles are the lytic effects of 'Varidase' and the words 'early' and 'partial'.

Terramycin is widely used. It has a broad spectrum, and it is claimed to be helpful against almost everything. We have found one usage where it seems to be on the less popular side. . . . One might expect, in the problem of CONCEPTION VERSUS CONTRACEPTION. that for some reason the drug would turn out to be the ideal prophylactic. Not so. It seems to be an aid to those childless women with poor or absent SPERMIGRATION (a term invented by some medical Walter Winchell). . . . The action may occur by the healing of an endocervicitis. . . . Ten pregnancies occurred within 3 months in a group of 35 infertile women (with normal husbands) after receiving 3 to 6 gm. of Terramycin on the 6th, 5th, and 4th day before ovulation. They had had an average barren period of 4.5 years apiece.

LIFE Magazine sees the rare side of surgery. A July issue tells of a transplant operation done at the Valley Forge Army Hospital. . . . A soldier in the Korean war had his thumb shot off. The forefinger was moved to its place, and with a fairly good functional result in motion, grasping, etc.

The impact of Dr. Hans Selye on the subject of ADAPTATION is secure. is volume 'Stress' brought the adrenals and nervous system together, and to the public attention. . . . Now he intends to reinforce the impact, and to 'red up' the disorder every year. He has published (from Montreal) an 'Annual Report on Stress'. The new volume includes his impressions of more than 3,000 articles!

Louis Dublin, chief statistician for the Metropolitan Life Insurance Co., has really pulled the rug out from under THE OBESE. . . . He calls them Public Health Problems No. 1, but stresses the fact that they can be cured, right now. . . . Between 20 and 64 years of age, the death rate of obese males is 50% higher than for the non-obese. Fat women have a 47% higher mortality than normals. The rate is generally in proportion to tonnage. . . . There are only two safe approaches to reducing,—appetite and amphetamine. . . . (This unsympathetic abstract, naturally, is written by a person who weighs just the right amount).

NEW VITAL STATISTICS LAW GOES INTO EFFECT

As final proof of the rising cost of living, the price for birth certificates has gone up. Like the penny postcard, the 50 cent birth certificate has become a thing of the past.

An increase in fees for certified copies went into effect October 1. The new charge is one dollar for each certified record issued by the Division of Vital Statistics. The new fee applies to both birth and death certificates.

Such an increase has long been deemed necessary, said Dr. Clarence G. Salsbury, State Director of Public Health, to meet the cost to the State for preparation of certified copies. The change in fee from fifty cents to one dollar was authorized last spring by the State Legislature through passage of a new Vital Statistics Act. The new law contains many revisions that bring Arizona into conformity with modern practices and standards of the National Office of Vital Statistics.

A new "short form" birth certificate is now being issued to provide concise information necessary to establish proof of age and citizenship. This abbreviated birth record carries the name of the individual, sex, and date and place of birth. Copies of the complete original certificate, which is kept in bound files, may be obtained by special request.

An entirely new birth certificate may be filed for a child whose parents marry subsequent to his birth, whose parentage is determined by court action, or who is legally adopted. Under the new law, the clerk of the Superior Court will notify the Division of Vital Statistics of each adoption. Thus each adopted child is automatically assured of a birth certificate in his new legal name.

The new law also provides for certificates for foundlings based on information furnished by the person or agency assuming custody of the child. The person assuming custody must report to the Division of Vital Statistics, estimating the date of birth. The place where the child is found is listed as the birthplace. Later, if the child is adopted, a new certificate is filed in the name of the adopting parents.

Proof of age and citizenship is commonly required of every individual from the time he enters school until he reaches the age of retirement. National officials have estimated that almost half of the nation's 88,000,000 native-born adults of 20 years and over today have no official records of birth.

For this reason, the demand for "delayed" certificates of birth is increasing. To meet this need and to assure the validity of such certificates, the Division of Vital Statistics has been given definite legal authority to require evidence as proof of age and birthplace. Such proof is required for all persons whose births have not been registered within seven years after date of birth. Since recording delayed certificates requires detailed searches and review of documentary evidence, the Legislature established a fee of four dollars which must be paid before a delayed certificate can be filed.

From the standpoint of public health and medical research, the most significant revision under the new law is a provision for a single fetal death (stillbirth) certificate. In the past, stillbirths have been registered first as births and then as deaths. This unnecessary duplication was both time-consuming and confusing. The old certificates did not contain desired information as to contributing causes of stillbirth. The new fetal death certificate is designed to further scientific research by providing pertinent data on causes of death. Loss of life during the prenatal stage is one of our most serious health problems. Only through a better knowledge of the causes of stillbirth can such a high loss of infant life be prevented.

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A.M.A. SECRETARY'S LETTER ANNUAL POSTGRADUATE CONFERENCE IN OPHTHALMOLOGY

"The Stanford University School of Medicine will offer the annual postgraduate conference in Clinical Ophthalmology from March 23 through 27, 1953. The program this year will be devoted to Ophthalmic Surgery. Registration will be open to physicians who limit their practice to the treatment of diseases of the eye or eye, ear, nose and throat. In order to allow free discussion by members of the conference, registration will be limited to thirty physicians.

"Instructors will be Dr. A. Edward Maumenee, Dr. Dohrmann K. Pischel, Dr. Jerome W. Bettman, Dr. Max Fine, Dr. Earle H. McBain, and Dr. Arthur J. Jampolsky.

"Programs and further information may be obtained from the Office of the Dean, Stanford University School of Medicine, 2398 Sacramento Street, San Francisco, California.

DOCTOR DRAFT LAW EXTENSION

The Washington Office of the American Medical Association reports that Defense Department officials, with the assistance of representatives from other federal departments and professional associations, have started work on problems of the physician-dentist-veterinarian draft, preparatory to asking for an extension and amendment of Public Law 779, scheduled to expire next June 30.

The Defense Department's Armed Forces Medical Policy Council sponsored the first discussion meeting, attended by spokesmen for dentists, veterinarians, hospitals, and medical schools, as well as the American Medical Association. Represented also were the Armed Forces, Defense Department's manpower division, Selective Service and the Rusk committee of which our Arizona Advisory Committee to the Selective Service System under the chairmanship of Joseph Madison Greer, M.D. is a part.

At the first meeting, held in the Pentagon, a Defense Department spokesman gave this outline of the problem which will be of interest to many of us:

1. Medical Priorities I and II will be exhausted shortly, and future requirements will have to be met from Priorities III and IV. Questionnaires are now being sent to a number of physicians in Priority III.
2. There are not enough men in Priority III to meet military requirements for long; unless the younger men in Priority IV are made available by a change in the law, the services will be offered too many of colonel and major age and experience, not enough for the captain and lieutenant commissions. Dislocating physicians of 15 or 20 years experience from their civilian practice will create additional problems.
3. The age and experience level of Priority IV men make many of them more acceptable, but it is possible that a high percentage already have had two or more years of active military duty; besides, these men cannot be called until Priority III has been used up.
4. The professional manpower shortage will continue until 1958, when enough non-veterans, currently deferred from the regular draft to complete their medical training, will be available to meet most military requirements.

No conclusions were reached at the first meeting, and association representatives were not asked to pledge support for an extension of P.L. 779 at this time.

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    Douglas D. Gain, M.D.
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    Lindsay E. Beaton, M.D.
13. "Diseases of the Kidneys"—10-21-52—(Maricopa)
    Louis B. Baldwin, M.D.

Howard C. Lawrence, M.D.
Chairman, Public Relations Board

AMERICAN ASSOCIATION OF PUBLIC HEALTH PHYSICIANS

A movement has been underway for quite some time to form an American Association of Public Health Physicians.

The movement, endorsed and approved by the A.M.A. Board of Trustees several months ago, was promoted by the following committee: Drs. Bruce Underwood, Louisville, chairman; Wilson T. Sowder, Jacksonville, Fla.; Grady F. Mathews, Oklahoma City; R. C. Williams, Atlanta; S. J. Phillips, New Orleans, and Frank E. Wilson, Washington.

The plan, which already has the support of many state and local health physicians on an informal individual basis, will be offered for consideration of the executive committee of the American Public Health Association when it meets in Cleveland late this month. The committee hopes also that it will have the endorsement and active sponsorship of the Association of State and Territorial Health Officers.

A statement, issued recently by the committee, follows in part:

"The general purpose is to provide an Association of American Public Health Physicians to which the Public Health Physicians in Local and State and Territorial Health Departments may belong. We feel there is a need for an American Association of Public Health Physicians. At the present time, there is no single agency or group which can officially speak for the Public Health Physicians of this country. The American Medical Association primarily represents the practitioners of medicine; The American Dental Association represents the dentists; the American Hospital Association represents the hospitals; the American Psychiatric Association represents the psychiatrists, and there are many other associations which represent various health and medical professions; but, there is none that adequately represents the Public Health Physicians.

"The American Public Health Association has a section for health officers, but the Association includes a majority of non-medical persons and, for this and other reasons, the association cannot, by its very nature speak adequately for the Doctors of Medicine engaged in preventive medicine and public health.

"The Association of State and Territorial Health Officers does not include district or local Public Health Physicians. Neither can the Conference of State and Provincial Health Authorities of North America, for the same reasons, represent all physicians engaged in preventive medicine and public health.

"All Public Health Physicians in this country should belong to and actively participate in affairs of the American Medical Association. Likewise they should belong to and actively participate in the affairs of the American Public Health Association. But, in addition, the Public Health Physicians of this country need an association limited to Doctors of Medicine in the field of preventive medicine and public health that can adequately represent their views nationally. The purpose of the association will be to foster and maintain leadership consistent with the ethical standards and fraternal desires of these medical administrators."

A. M. A. Secretary's Letter